U.S.I. JOURNAL

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NOTE

The views expressed in this Journal are in no sense official, and the opinions of contributors in their published articles are not necessarily those of the Council of the Institution.

One who did not waver...

Jamshedpur's latest blast furnace needed a 'big bell'—a 20-ton component requiring highly skilled casting and machining. A difficult operation even if the right machine tools were available, but in 1958 they were not, and import seemed the only solution to all but one determined and resourceful young engineer, N. P. Naik.

Working on this problem in his leisure hours, Naik gradually crystallised his ideas into mathematical formulae and blue-prints. He developed, at the same time, a new machine tool to do the job by remodelling a small boring machine, stage by stage. Then started the casting and intricate machining, until, in a short time, Naik and his colleagues succeeded in producing a 'big bell', fully meeting the technical specifications to the last detail. As a tribute to Naik's fine endeavour, Tata Steel gave him an award of Rs. 10,000, the highest made under a ten-year old scheme to encourage initiative from the shop floor.

Men like Naik are carrying forward

a fine Jamshedpur tradition,
recalling Jamsetji Tata's exhortation:
"Let the Indian learn to do
things for himself."

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EDITORIAL

SAINIK SCHOOLS

THE Government of India's decision to open Sainik Schools in almost all States of the country has come none too soon. In these challenging times when the country's integrity is threatened not only by foreign incursions on her northern borders but by diverse internal dissensions and fissiparous tendencies based on religion, caste and language, any movement working towards the integration of the country should be welcomed. The process of integration cannot be expected to end with the integration of administrative units. As it is a continuing process of organising the people's life as a secular social democracy, education forms the keystone of this national edifice.

Quite unlike earlier forms of social organisations which have provided for the education of the elite only, leaving the rest to fend for themselves as best they might, an attempt is being made in these Sainik Schools to enunciate a concept of education which can be the basis of educational reconstruction in a secular social democracy. In earlier centuries, both in the East and the West, provision was made for various types of schooling for the different classes and the different ranks, whether they were labelled the four castes as in this country or the knights and squires and gentlemen or patriarchs, merchants and guildmen as in Western Europe, each with their own more or less defined educational ideal. Such a system is neither possible nor permissible in a secular society; and to hammer into shape an educational ideal of the older kind, valid for all as a mould into which each citizen's mind can be poured and shaped, would now be an absolutely hopeless enterprise.

It is this principle of individual and social mutuality so seldom kept in view in the organisation of our education that forms the underlying philosophy behind the Sainik Schools. This principle is in harmony with what the President Dr. Rajendra Prasad observed recently that public schools should "relax the bonds of exclusiveness as far as possible by throwing open admission to all classes and groups of people." While no one can dispute that the public schools have given quality education and allround leadership training, admission into such institutions was reserved for the privileged few. An assault has now been made on this preserve by opening these Sainik Schools, modelled on the pattern of public schools, but with their doors open for all classes and groups of people.

Already five schools have started functioning in Maharashtra, Gujarat, Rajasthan and Punjab and four more are expected to be started soon in the States of Kerala, Andhra Pradesh, Orissa and West Bengal. The oldest Sainik School in India, the Rashtriya Indian Military College, Dehra Dun, formerly known as the Prince of Wales Royal Indian Military College, was started in 1921. But as it was not able to meet the total requirements of the National Defence Academy at Khadakvasla, the need for opening more such schools became evident. The deficit could not be made up either from other schools partly because of the attractions of civilian career in this age of national development. Further, the amount of technical detail that an officer in any of the Armed Forces must now know is such that, compared with his predecessors of only a few years ago, he has almost to become a "general expert". It is obvious, therefore, that the right sort of training must be given from the early life and the oldest Sainik School, the RIMC, was itself indirectly a product of the marked technical change that had come over the Armed Forces in the First World War.

Like its progenitor, the new Sainik Schools, whose number may later be increased with growing demand, will in course of time become feeder establishments for the National Defence Academy at Khadakvasla. They will impart a special type of education with a military bias to boys in the 9-17 age-group. Character, team spirit and patriotic outlook, with a desire to serve the country, will be some of the qualities on which emphasis will be laid at these public institutions. Special stress will be put on the house, tutorial and prefectorial systems, extra-curricular activities, training in technical subjects and compulsory P.T., drill, organised games and Cadet Corps training. Whereas there will be no obligation on the students of these Sainik Schools to join the Armed Forces, yet an effort will be made to inculcate in them qualities of leadership, like discipline, character, self-confidence and self-reliance, so as to fit them for any public service. It is to be hoped that Sainik Schools, like the Armed Forces will be a great unifying and levelling force in the country.

BACKGROUND TO THE NEUTRAL NATIONS' SUMMIT

By K. P. KARUNAKARAN

THE conference of the non-aligned countries—popularly referred to as the Neutral Nations' Summit—which was held at Belgrade in the first week of September 1961, was the first meeting of its kind. But the concept of "non-alignment" was not in any sense new. It is as old as the cold war itself. Emphasizing the fact that the conference was only institutionalizing an existing trend in international field, Marshal Tito, one of its sponsors, said "The vast majority of mankind fears the consequences of the present international tension and opposes the present cold war policy and the growth of mistrust and tensions in the world. Experience has shown, however, that by themselves the individual non-aligned countries cannot accomplish anything effective with regard to the improvement of international climate regardless of how correct and just their views and attitudes may be; therefore a united, resolute action by the greatest possible number of countries that do not belong to either bloc is necessary. The conference of leaders of the non-aligned countries was convoked with this objective in view."

This article aims to examine the background to this conference and the political factors which led to the origin of the concept of non-alignment in the cold war and its popularity during 1953-61.

The first articulate champion of non-alignment was Pandit Jawaharlal Nehru. Even before India became free, he propounded the idea. As a Member for External Affairs in Viceroy's Executive Council, Nehru said in September 1946: "In the sphere of foreign affairs India will follow an independent policy, keeping away from the power politics of groups aligned one against the other." In August 1947 India became an independent country. With the addition of Burma, Indonesia and Ceylon to the group of countries, which refused to join any alliance with the power-blocs, Indian spokesmen began to speak of a peace area. With the success of the revolution in Egypt, Middle East had a powerful champion of non-alignment in that area. Later, Iraq was disentangled from the West by successful armed revolt led by Kassem. In Europe, Yugoslavia, which broke away from the Soviet camp in 1948, was the first important symbol of neutralism. In recent years the neutral attitude towards the cold war was gradually asserting itself in Latin America also. The concept of non-alignment was thus getting new adherents and becoming a factor to reckon with in the international field. The nations, whose delegations assembled at Belgrade, constitute almost one-third of humanity and came from various continents. They were Afghanistan, Algeria, Burma, Cambodia, Ceylon, Cuba, Cyprus, Ethiopia, Ghana, Guinea, India, Indonesia, Iraq, Lebanon, Mali, Morocco, Nepal, Saudi Arabia, Somalia, Sudan, Tunisia, United Arab Republic, Yemen and Yugoslavia. The following Latin American countries sent observers to the conference: Bolivia, Brazil and Ecuador. Later, a delegation from Congo also joined the conference. The exclusion of some countries from this list is very significant. During the meetings of the Ambassadors' Committee at Cairo, which dealt with the question of the invitees, India pressed the claims of Sweden, Finland. Austria and Ireland to be represented at the conference. But the majority of the other countries objected to them. There was no doubt that these countries were not aligned with any bloc or connected with any military pact. Then, why was their presence objected to? This raises another fundamental question: What is non-alignment?

NON-ALIGNMENT AND ANTI-IMPERIALISM

Two of the principles accepted as the criteria by the Preparatory Meeting to the Conference, which was held in June 1961 at Cairo, were: "(1) The country should have adopted an independent policy based on the co-existence of states with different political and social systems and on non-alignment or should be showing a trend in favour of such a policy. (2) The country concerned should be consistently supporting the movements for independence". The European nations mentioned above fail in the second test and that is why their presence at the conference was not welcomed by some "neutral nations."

In the opinion of many African leaders the question of non-alignment in the cold war and military alliance could not be separated from those of anti-imperialism. One of the reasons why the Casablanca Powers of Africa held a meeting before they proceeded to Belgrade was to co-ordinate their views on this question and to press for their acceptance at the summit conference.

The Preparatory Meeting, which also decided that the conference should adopt its own agenda, proposed among the following matter for discussion: ".... Exchange of views on the international situation; Establishment and strengthening of international peace and security; Respect for the rights of peoples and nations to self-determination; Struggle against imperialism; Liquidation of colonialism and neo-colonialism."

There were reasons to believe that the Indian Government was not happy with the mixing up of the questions of war and peace with colonialism. Many in India felt that imperialism, though not a dead issue, was a gradually dying one. Apart from this fact, there was this aspect of the matter to which Nehru pointed attention at Belgrade. "First things must come first, and nothing is more important or has more priority than this world situation of war and peace. Everything else, however vital to us—and other things are vital to us—has a secondary place." Although the resumption of the nuclear tests by the Soviet Union on the eve of the Belgrade conference strengthened Nehru's stand there were many neutral nations who were unconvinced by the argument that colonialism was dead or was gradually dying.

REASONS FOR THE EMPHASIS ON ANTI-COLONIALISM

There were valid reasons for their scepticism. Among the non-aligned countries India's position was unique. In this country, the transfer of power from the Imperial Government to indigenous leaders took place in a peaceful manner and the leaders of the independent government very soon established good relations with their erstwhile rulers. But countries like Indonesia had literally to wade through blood to freedom. Even after the achievement of independence the Indonesians felt that they were often threatened by foreign interference. They have also not reconciled to the fact that West Irian is still not free. The present leaders of the Ceylonese Government have also similar complaints against foreigners. When they began to assert their independence and tried to implement a comparatively radical programme at home, the conservative elements in the Ceylonese society hoped to come back to power with foreign help. Many Ceylonese nationalists felt that the foreigners were not unwilling to fulfil this hope of their political opponents. All these developments had created a radical political climate in these countries in which anti-imperialism is at least as important as the pursuit of peace.

When we turn from these countries to Africa and the Arab world we see that this bitter opposition against the Western Powers exists there in an

accentuated form. During the Suez crisis Egypt had a life and death struggle with Western imperialism. Ghana's relations with the West were also not happy before and after the achievement of independence. In all these countries there are some cliques who are enthusiastic of getting the support of the foreigners for sabotaging the national governments of the countries.

Congo is the most recent and classic example where the retreating imperialism, in its rearguard action, has succeeded in doing immense havor to the political unity, freedom and economic progress of the country. Even India has paid a dear price for it by sacrificing the lives of her soldiers in the battlefields of that country. To the Africans Congo was a symbol—the symbol of the determination of the Colonial Powers to hold to their own possessions. Indicative of their approach was the following comment made recently by the editor of "Al Ahram" of Cairo on Nehru's role in the Belgrade Conference. "Only two weeks after the Belgrade Conference the wise man of India himself discovered that imperialism has not breathed its last." The event he was referring to was the death of Hammarskjoeld.

At the Preparatory Meeting held at Cairo itself there was a cleavage of opinion between India the "Moderate" and some African States who were the "militants". It referred to the following specific questions: (1) India did not agree with Ghana's view that Gizenga regime of Congo should be invited to the conference. (2) Almost all the African States demanded that the Provisional Algerian Government should be accepted as a full-fledged member of the non-aligned camp. India wanted only the non-aligned members of the United Nations to be invited. (3) During the discussion on the definition of the term "non-alignment" Guinea maintained that a "non-aligned country" was one which "having officially adopted non-aligned policy and given positive proof of non-alignment nationally through non-adherence to military pacts and by banning military pacts and by banning military bases inside its national territories." The Indian delegate favoured a more flexible definition which allowed that "nations which involuntarily have a foreign base on their soil should not be deprived of the right of attending the conference. Tunisia was in the background of these discussions in which the U.A.R. and Indonesia played a role of conciliators between India and the Guinea-Mali group.

To the sovereign states of Africa the extension of freedom to other countries is not just the matter of fighting for a principle but one of defending their own freedom. Recently President Nkrumah of Ghana said: "The two basic aims of our foreign policy are African independence and African unity. The one is inextrically bound with the other." He added: "The third aim of our foreign policy, closely allied with the other two, is the preservation of world peace." It is significant that he gave only third place to world peace although he realised that all these are allied problems. Guinea and Mali also look at world problems in this light, and perhaps much more so than Ghana. Cuba was another non-aligned country which, for understandable reasons, was concerned with anti-colonial questions, rather than those of peace.

WHY THE DIFFERENCES IN APPROACH?

To understand the differences in approach of the different countries towards the question of giving priority to problems of war and peace or to that of antiimperialism one has to go deep to the nature and character of the governments in
power in these countries. India has a comparatively developed bourgeoisie because
of its industrial base. Next to Japan she is the most highly industrialized country
in Asia and Africa. A country like Ceylon has a higher standard of living than
India, but as that standard of living arises from the high price of some plantation
products and not because of any industrial development in the country, there is

no strong and mature industrial or middle class in Ceylon comparable to that of India. This is true of other countries like Indonesia, the U.A.R., Ghana and other African countries, whose politics have become radical and whose foreign policies show an uncompromising opposition to imperialism in whatever form.

The differences of approach of different governments in Belgrade should be understood in the background of these factors and not, as some correspondents described it, in the degree of the sense of responsibility of different leaders of the non-aligned world. No doubt, the Indian and Yugoslav leaders have a greater awareness of the destructive nature of modern wars than some others who attended the Belgrade conference. They also had a global, rather than a regional, approach to international problems. But this awareness and approach are themselves the reflection of the social composition of their governments, political stability and economic progress in their countries. Neither Yugoslavia nor India faces now a threat to their freedom or unity.

This then was the background to the Neutral Nations' Summit. To India the foreign policy of non-alignment was an expression of her desire to promote peace in the world. To many other countries represented at Belgrade it was connected with the following questions: (1) the defence and extension of their freedom; (2) the support to other countries which are struggling to be free and (3) maintenance of internal stability by accepting a foreign policy which is acceptable to the majority of the people and by avoiding one which will give great strength to some cliques, often associated with the conservative elements in the society. These differences of opinion in the non-aligned camp are not surprising because similar differences exist even in the well-organized Communist world and the Atlantic bloc. The differences of opinion between China and the Soviet Union are expressed in ideological terms, but students of political development and thought are fully aware that the fundamental reason for the conflict between the two is the different levels of social and economic development between the two countries; while the Soviet Union is thinking in terms of sending her scientists to the moon and the gigantic twenty-year plan for economic development, China is engaged in the task of giving the basic necessities of life to her people. The conflict between the Western European states and the U.S., though expressed in terms of ideas, reflects the different levels of their economic, political and military strength. The same is true of the non-aligned world; apparently, the source of discord between India and some other non-aligned countries is because India takes a global view of international questions, while the latter are exclusively concerned with regional problems. But as we noted earlier the basic reason for the differences in approach is their different levels of development and the different problems of national reconstruction they are facing.

OTHER CONFERENCES OF ASIAN-AFRICAN STATES

Before we conclude this paper on the background to the conference of the non-aligned countries, a reference to other conferences and groups in which some of these countries played an important part will not be out of place, because frequent attempts are made to trace the ancestry of this conference to them. The conferences mentioned are the non-official Asian Relations Conference convened by India in March 1947 in New Delhi, the Asian Conference on Indonesia held at New Delhi in January 1949 and the Bandung Conference of the Asian-African states which met in April 1955. Other conferences of this type were held in Africa where many leaders and heads of the Governments participated. The Asian-African group in the U.N. was referred to as another instance of co-operation among these countries. The relationship between these conferences and groups on the one hand and the neutrals' summit on the other can be highly exaggerated. Although

some participants are common to both, some others are not. The Asian-African Conference and groups were territorially organized and some among them included such states as Pakistan and China which were far from non-aligned. Yugoslavia was excluded from these conferences. The Neutral Nations' Summit is global in character in that the countries of Europe, Asia, Africa and Latin America attended it.

There are many other views on the origin of the Conference. It was reported that Marshal Tito conceived the need for a meeting of non-aligned states in the year 1959 when the Chinese and the Russians launched a campaign to discredit Yugoslavia among the Asian countries. There is no doubt that President Soekarno and President Nasser were also its active proponents. As early as on 4 July 1960 President Nkrumah had expressed a desire to convene a conference of all non-committed nations—particularly of Africa and Asia.

Whatever may be the origin of the Neutral Nations' Summit, it is an undeniable fact that it is an important event. It is a landmark, rather than a crossroad, in the post-war world; because, instead of indicating any new trend in international affairs, it symbolized a certain crystallisation of many political forces which were making themselves felt for the past few years. It did not lead to the emergence of any bloc, because the major participants in it were not interested in creating one. Apart from giving expression to the desire for peace, which existed in different parts of the world, it could not contribute very much in that field, because, in the ultimate analysis, questions of war and peace can be determined only by the Big Powers. But the expression of a desire for a peace by the representatives of a large section of mankind will have a moral force.

Another effect of the conference was the strengthening the movements of freedom in Africa. Here, again, its influence is not in any concrete achievements, but in giving a moral support to it. But this is very important as is evident from the fact that the international stature of the national governments of Congo and Algeria was considerably raised by the Belgrade Conference.

NEW THINKING ON THE TRAINING OF JUNIOR ARMY OFFICERS

By BRIGADIER N. S. RAWAT (Retd.)

A FAVOURITE slogan of a wartime Commandant of Chemical Warfare School was: "Untrained troops make gas effective." He was not tired of repeating this in his morning, afternoon and evening lectures. One could go further and say "Untrained troops make the enemy aggressive and ultimately victorious." As the responsibility of training their troops is that of officers, it follows that ill-trained officers are the greatest risk or a most potential danger to a nation. Because the Armed Forces are a nation's last refuge and on them does it ultimately depend for its very existence. The point for consideration, therefore, is: Are we giving this vital matter the serious and the careful attention it deserves? And what can we do to set right the deficiencies in the existing training? It would not be prudent to base it on the type of the "snobbish" education of the most expensive (and exclusive) institutions like the Doon wherein an undue stress is laid on "decorative trappings" or the social atmosphere of a drawing room. Because that would be turning out Carpet (and not battle) Knights. That type of instruction cannot but fail to crumble with the impact of the much vaunted "Socialist pattern" of Society or under the pressure of the new ideas and demands of the age.

The selection of officer cadets is probably being done on the whole in a reasonably good manner, but what about their further training? For the training and the experience are two of the most important factors that go to make an officer.

Since October, 1932, i.e. when the I.M.A. started functioning in Dehradun, the training is being imparted on what may be said to be a carbon copy of the excellent system then followed at the Military Academy, Sandhurst, U.K. This was later on in 1950 modified to include also some of the principles of West Point (the American Academy) advocated after a fortnight's stay there by the National Defence Committee under the able leadership of the great educationist, the late Dr. Amar Nath Jha.

It is, no doubt, true that a few vacancies are still being generously offered to our senior officers at the Imperial Defence College and the various Staff (or Joint Services) Colleges at the U.K. or the U.S.A. But we are here concerned with the training of the very junior officers.

Thirty years is a long time and during this intervening period much water has flown down the Ganges and many important changes must inevitably have been effected since then. Our syllabus of training must consequently have suffered from lack of current and new ideas and thinking and necessarily have become rusty, behind times if not antique. Moreover, the Sandhurst trained KC10s left now are either too senior in rank or too few in number and the Army shall have shed the last of them by 1966 or so. The following suggestions are, therefore, offered for the consideration of the policy making "Pundits" of the Army:

LATEST TRAINING

Four or six intelligent, young, receptive and potential Instructor officers with six to eight years service should be carefully selected. Arrangements should be made to send them to Sandhurst (UK) and to West Point (USA) and if possible to Russia. There must be something unique in their Military Institutions which could infuse (and enthuse) their men to fight with that unsurpassed tenacity, devotion and

patriotism for their fatherland as they did in World War II. Besides there is a great deal of similarity in the conditions obtaining in Soviet Russia and our country.

To derive the maximum benefit these officers should personally undergo the trainings imparted to the cadets but for much shorter periods say for six months or a year at the most. They should then work with the instructional staff to learn the methods, the organisation and the administration. These officers on return after about two years' deputation should then assemble under the auspices of the Directorate of Military Training and freely and frankly exchange views on the lessons learnt at the foreign institutions. From their pooled thoughts should be evolved the system and syllabus of modern training best suited to our country's actual needs and requirements of the present and of the near foreseeable future. This should similarly be done for the other arms or services like the Engineers, Artillery, Armour, Army Services Corps, Medical, the Air Force and the Navy. As far as the Navy is concerned one great redeeming feature is the annual exercises they hold with the Navies of other countries particularly the Royal Navy. This unique opportunity of keeping abreast of the latest concepts or ideas is not obtaining to the Infantry or the Air Force.

Such deputations should be repeated after every eight or ten years to ensure that there is a continuous flow of uptodate ideas or techniques, and that we continue deriving the maximum benefit from the experiments, researches and advancements made by other advanced nations.

TRAINING FOR TOUGHENING AND HARDENING

It is noticed that the lure of cushy Staff jobs, Extra Regimental Employment (including Instructional appointments) or the soft denervating "Mughalia" life of the cities, towns or cantonments unduly attract the officers even in the beginning of their careers. Officers who, on the other hand, should be toughening themselves and enjoying the adventures or the real hardships of soldiering. There is, thus too much of this hankering for soft, feathered jobs or the musical chairing for them and evading the hard and tough life in the units especially in Jammu and Kashmir or the North East Frontier Agency. It is only a few Company Commanders or even Battalion Commanders who complete their full term of two or three years continuously in the field areas, in spite of the many reasonable concessions given by the Government.

A rule could perhaps be made that an officer must necessarily revert to Regimental duty after every four years and do a tour of duty in the field areas of J and K or NEFA once within every six years; so that with twelve years service or when an officer is approaching the zone of Second-in-Command he should have done about four years at least in the field areas. He can then rightly have no fear of it being said of him:

"Our Sahib is a great guy. He is a first rate sportsman, a great mixer, and a hilarious social figure. Gee—how superbly he dances, how adroitly well he plays his hand at cards and what a hit he makes at the club or parties, especially on the fairer sex. He naturally prefers a cosy life. And thanks to his influential relatives or contacts he manages to evade the hard and difficult service in the bleak NEFA or LADAKH."

Such an officer loses the real respect of his men with the result that the morale in general tends to go down. It is for the good of the officers themselves in particular and that of the army in general that they live out with their men in tents, in bunkers, in the open and the field. He should take delight in taking the rough with the smooth. A glib tongue or the gift of gay will be no substitute for toughening or for gaining experience.

Otherwise it is hardly fair that a few officers should spend nearly their entire service in the field areas, whereas some others with no field service at all or only show round to the men their Red tabs. A careful study of the dossiers will amply bear out the correctness of the above statement regarding the dangerous tendency.

ARMY COURSES OF INSTRUCTIONS-BEFORE, DURING AND AFTER

It is said, that the Navy have a system, a very good one if its is true, of encouraging their officers to go full out and do their very best in the various courses of instructions; and that those who obtain distinctions of Axs are given weightage leading to even antedating of their seniority. This good system could with benefit be followed by the other services as well, as it would undoubtedly be the greatest incentive towards raising the tone of efficiency of the officers in general. Thus an officer who obtains six distinctions (or Axs) in the Army Courses of Instructions could be given say an antedate of three to six months' seniority for purposes of pay and pension at least. It would make the courses extremely popular to officers aiming to forge ahead or to advance. Each Officer must be made to do one Army course within two years. And it is not quite right that he should fight shy of the courses by doing none at all nor should he pack too many in a short space of time. In the latter case he can hardly prepare himself adequately nor does he get time to "pass on" what he has been taught. The teaching aspect is important both from the point of view of the unit and that of the officer himself. For by teaching one learns or assimilates far more.

STUDY OF MEN'S CUSTOMS AND BACKGROUND

During the days of the British, it was not unusual for keen British Officer to spend at least one term of his leave (even up to 8 months!) in the very interior of the country, i.e. from where his men were recruited. By so doing the officer came to know the customs, the habits and the psychological background of his men intimately and thoroughly. He was then in a better position to appreciate his men's many problems and viewpoints which he would otherwise have considered flimsy and trivial or even not be able to understand at all. How could he, coming from an entirely different set-up or from an enlightened family and brought up in a sophisticated atmosphere with education of exclusive public schools like the Doon?

There was one such B.O. "R" who even prided at calling himself a Garhwali. He would go to the innermost village of Garhwal on 8 month' leave (the travelling was no picnic affair in those days) taking with him bundles of clothes, books for primary classes, slates, pencils, sports gear, playing cards, cigarettes, patient medicines, rum and such like things. He would go from one village to the other, live there, attend the village fairs (melas) and distribute the above items. He would help the village folks in many ways, like seeing the Deputy Commissioner, the Forest Officer, the Inspector of Schools, the Medical Officer, the Engineer, for the various minor problems of the villagers. He would do the letter or write petition for them. He would educate them about the grand life in the Regiment and the many concessions or previleges given by the benign Raj. He thus carried out an insidious propaganda for service in the Army and ennobled it in preference to the other services or vocations of life.

What "R" or his type could do 30 to 50 years ago, our young lads should be able to do far more easily and effectively. They have the great advantage of knowing the language and the customs. Such visits will have considerable influence on the men and make a vast difference in the officers' future career. The men are bound to trust and respect such officers and they will gladly follow them anywhere to the very jaws of death if need be!

INTERESTING FEATURES OF US ARMY SCHOOLS OF INSTRUCTION

By COLONEL M. R. RAJWADE, MC

THE object of sending officers of the Indian Army to attend courses of instruction abroad is mainly to give them an opportunity to study developments in military thought and practice and acquire knowledge of the latest weapons, equipment and techniques. Further it affords them a chance of working closely with people of different countries.

The aim of this paper is to describe certain noteworthy features of US Army Schools of Instruction, as observed by the author during his stay at the Command and General Staff College during 1959/60 and later during visits to other branch schools. It is hoped that the subject will provide food for thought and enable the reader to compare conditions in our own Army schools and thus help him to suggest changes or improvements.

US ARMY COMMAND AND GENERAL STAFF COLLEGE

ORGANISATION

The College is organised into a Command Group, Offices of Chief of Resident Instruction, Chief of Doctrine and the Secretary. The actual instruction is carried out by the Departments of Infantry Division, Armoured Division, Airborne Operations—Army Aviation and Unconventional Warfare, Larger Units and Administrative Support, Nuclear Weapons, Staff and Educational Subjects, Combat Developments and lastly Non-Resident Instruction. In addition, there are the Navy, Marine and Air Force Sections. There is also a separate office of the Allied Personnel Supervisor and a Combined British-French-Canadian Liaison Section.

The functions of all the instructional departments mentioned above are self-explanatory except perhaps those of the Department of Non-Resident Instruction. Since it is not possible for all regular and reserve officers to do the Staff course, the College offers Extention, Army Reserve School, Staff Training and Nuclear Weapons Employment Refresher Courses as part of the US Army's correspondence system of education. As all these courses follow identical sylabil with the formal resident courses, a great deal of effort is expended by the Department in keeping the teaching current in every detail. The Department of Non-Resident Instruction also acts as the registrar for its students, keeping extensive records on the work completed by each student, a tremendous task in view of the fact that the students number almost 17,000.

Two other components which may be of a special interest are firstly, the Office of the Chief of Doctrine—a set up of which there is no parallel in any of our schools. At the Staff College level is found the first merging of activities of all the arms and services into combined doctrine covering the operations of a division, a corps and an army and their supporting administrative systems. The responsibilities of the Chief of Doctrine extend to the development of training literature, the coordination of recommended doctrine and new concepts and the review of combined arms teaching developed by other Army schools and agencies.

The second noteworthy organisation is the Office of the Secretary. The functions of this office are a combination of the duties of our AA & QMG, Programming officer and Methods officer, with a number of additional tasks thrown in. It provides the administrative and logistical support of the College and the student body. Its other activities include such instructional support functions as the Library and archives, class room services, printing press and the provision of the excellent audio-visual training aids. It is also responsible for all financial grants, accounts, posting and transfers of personnel and the procurement and issue of supplies and equipment.

CONDUCT OF INSTRUCTION

The Command and General Staff College conducts annually a number of courses in addition to the Regular Course. These are the Associate, Nuclear Weapons Employment, Logistical and Senior officers Nuclear Weapons Refresher Courses. The Associate courses help those officers who do not get selected for the Regular Course, whilst the Logistical Command and Nuclear Weapons Refresher Courses provide higher military education for senior officers. In order to cope with this additional work load the Staff College is allotted adequate number of instructors.

When I joined the 1959/60 Regular Course, I was quite surprised to learn that the US Army students were only nominated for the course and they did not have to take competitive examinations. After discussing this problem with a number of American instructors and students. I have now come to the conclusion that there is a lot of logic in this system. First of all, before an officer is selected, he has to satisfy a number of conditions relating to regimental service, special to arm/ service courses, educational qualifications and so on. As much as 50% of the Regular Officer cadre is put through the Staff course and the argument in favour is that the larger the number who can be given higher military education the higher the standard of the officers of the Army. Further, they feel that the really brilliant officers would stand out in any case whether there is an entrance examination or not. It may also be of interest to note that at the end of the Regular Course there is a very difficult and comprehensive written examination. Our own strict competitive examination system does not by any means guarantee that only the best officers are selected for the Staff College. There are a number of cases of some excellent regimental officers who cannot pass the examination and who in the process become over age. I believe that for our conditions a combination of the entrance examination and direct nomination would prove to be the most suitable system of selection.

The aim of the Regular Course is to train officers both in staff and command functions and to fit them to hold suitable appointment at divisional or higher level. The frame work of instruction is the discussion of problems in groups with one of the students appointed as a leader. Each section has one instructor who generally coordinates and guides discussion and at the end of each lesson or period answers questions and sums up the important points brought out during the lesson or exercise. Unlike our own and the other Commonwealth Staff Colleges, the instructors specialize in particular subjects to a far greater extent. For example, only the instructors from the Dept. of Armoured Division would conduct classes pertaining to the employment of the Armoured Division in the various operations of war. This does, however, mean that any one section or syndicate of students does not have the same or even a set team of instructors for a particular term. I believe this is unavoidable and to an extent necessary for a number of reasons. The subjects including Nuclear Weapons Employment are extremely complex and diverse whereas the syllabus is extensive covering the Command and Staff aspects of employ-

ment including administrative support of all types of formation from a Division to an Army Group. Further, the College has to cater for approximately 800 students per Regular course each year. It will be impossible and in many ways unwise to expect instructors to take classes for all or even a part of the subjects that are taught.

During the last week of the course all students are given a comprehensive written questionnaire regarding suggestions for the improvement of the course. Since almost all the activities are taken into consideration, the suggestions from approximately 800 students help the College authorities tremendously in incorporating suitable changes or improvements in the next year's course.

After graduation a number of officers, I was told, are sent for higher studies—Bachelor's or Master's Degree—to the various universities. This is particularly so in the case of those officers selected for Military Attache and other important staff appointments at the Pentagon. As a result of their post-war experience and in view of their world wide commitments, US Army authorities have now started paying special attention to the selection of Military Attache and Military Assistance and Advisory Group Staffs. Selected officers are not only given higher military education at the Staff College or National War College but also special language instruction which includes University education and extensive visits abroad. Officers are, of course, meant to specialize in a particular language, depending on individual's aptitude and choice.

SOCIAL ACTIVITIES AT US ARMY SCHOOLS

The Regular course of 1959/60 at the Command and General Staff College included a total of 81 foreign officers representing 43 countries. Of these approximately half the number were accompanied by their wives and children. The progress and welfare of this formidable contingent was the chief concern of the office of the allied personnel superviser and the sponsors. During my visit to other schools and even in Field Formations, I found that similar establishments existed for the reception and conduct of foreign students or visiting officers.

Each foreign officer was sponsored throughout the course by a member of either the instructional or administrative staff and whose ever open door offered the comforts of a home away from home and whose task it was to smooth the path of the stranger in an unfamiliar land. Almost from the very day of their arrival, the foreign officer and his family depended on the sponsor, without whose assistance and advice specially in the early days, they might have found the American way of life baffling indeed!

The office of the allied personnel superviser is responsible for all the administrative arrangements connected with the professional and social activities. The eight-week preparatory course for foreign officers is also organised under its auspices. This office, however, acts not only as an instructor, but also counsellor, travel agent, publicity manager and friend of the visiting officer. It sponsored visits to theatres, football games, luncheons of various public and private bodies and host of other social events. To all members of this office, the foreign officers and their wives owed much for making their stay happy and comfortable.

DRESS

Before proceeding to the United States, I had known little about the social customs of the country and also to be on the safe side I had taken with me almost every type of dress particularly of the formal variety. When we reached Leavenworth in the end of July we found that the climate there almost exactly similar to

that of Ambala! Within a week of our arrival, there was a formal reception for all the Commonwealth students and their wives. I was most pleasantly surprised when I was informed that I could turn up in OG bush shirt! Later on during the course there were a number of formal, informal, private and other types of functions and at no time was one asked to wear clothing which did not suit either the occasion or the prevailing climatic conditions. I don't think I wore my summer or winter patrols more than four times during the whole year whereas Dinner Jacket and formal lounge suits, etc., were seldom if ever used. The Americans have an extremely practical and informal approach to the question of dress whereas we—particularly in the Army—specialise in making our formal dresses more complicated, expensive and uncomfortable!

LADIES CLASSES

At army schools of instruction, particularly on long courses when the majority of married officers are accompanied by their wives and their children, I think it is most essential that the wives are kept busy with activities a little more interesting and useful than cards, "coffeeing" and scandalising! I was most impressed by the variety and number of classes which are organised at almost all US Army Colleges and Schools. For example at the Command and General Staff College there were regular classes covering activities such as cooking, flower arrangements, needlework, dress making, interior decoration, foreign languages and games. With such a wide range of choice, it was usually possible for all ladies to select one or more of the subjects.

PARTIES

Finally I would like to describe a few interesting aspects of social functions. During the course there were a few formal but a large number of informal parties and without an exception all were well organised. The quality of entertainment by our or for that matter any other standard was lavish. However, what impressed me most was the extreme informality and the complete absence of boredom at these functions. Another admirable feature was the habit of the American men of not allowing the ladies to sit around in a tight feminine group! It must also be said to the credit of the ladies that they allowed themselves to be kept on their feet.

CONCLUSION

Whilst reading the above impressions, one might be tempetd to accuse me of overrating US Army Schools of Instruction. Of course, I cannot claim that I agreed with or was impressed by every thing that I saw. However, the aim has been to highlight only the good points with the main object of providing the reader with material for comparison. Throughout the long history of the Indian Army our foreign contacts have been restricted to our connections with the British Army whose system and peculiarities we have too often tried to follow or copy, blindly. In the past, we have known little about the US Army but I feel convinced that with closer association and understanding we will realise that there is a lot that we can learn from them.

USE OF ARMOUR AFTER PARADE HOURS

By LIEUT-COLONEL E. A. VAS

THE Armoured Corps have an excellent system of exploiting their 'trade-union-hours' of usefulness. Thus, we find young cavalry officers, even before they have purchased their mess kits, precociously reminding one another about the intricacies of tank telescopic-light.

Few servicemen appreciate the full implications of the Armoured Corps trade-union-hours. Whilst the rest of the Defence Forces are expected to fight and train, at any time of the year, any time of the day, any place and in any climate—the Armoured Corps manage to avoid heavy snow, rain, fog, bad terrain and all of the night from half-an-hour before sunset to half-an-hour after sunrise; on the technical grounds of being unequipped to function under such unsuitable conditions.

Leaving aside the factors of bad-going caused by the nature of terrain or the weather, the question of the use of tanks at night deserves a little more attention.

PAST ACHIEVEMENTS OF ARMOUR AT NIGHT

World War II provided a number of instances where tanks were successfully employed in battles during the night. The few examples which follow amply illustrate their value and are recounted to emphasise that their use at night is by no means unorthodox or a revolutionary concept.¹

In 1941, a battalion of New Zealand Infantry and 44th Royal Tank Regiment did intensive training together in long zig-zig night marches to previously selected objectives. These tactics were then employed against the formidable BEL HAMED position in November 1941. A combined infantry tank group broke through the defences there, penetrated to a distance of three and a half miles at night without consolidation and joined hands with the Tobruk garrison at EL DUDA. The operation was a complete success and would have been impossible by day, as their route was under observation from the defences at REZEGH.

Again in January 1942, the plan for a day light assault with tanks against BARDIA was shelved as this would have proved too costly. An alternative plan was adopted. In Phase 1, an armoured regiment supported by two infantry battalions and engineers broke into the defences at night. In Phase 2, at first light four infantry battalions supported by one armoured regiment followed through. In fact, Phase 1 was a complete success, though Phase 2 had to be postponed to the next night, because of a German counter attack at first light, which over-ran the left-hand battalion position at the bridge head.

The next example is once more from North Africa. Towards the end of the Tunisian Campaign, large German and Italian forces were withdrawing to strong prepared positions across CAPE BON peninsula. Realising how important it was to forestall the enemy's efforts to establish himself in their new positions, Field Marshal Alexander ordered 6 Armoured Division to cut across the neck of the peninsula on the night of 8/9 April 1943. The division moved with shattering effect: within four days over a quarter million Germans and Italians laid down their arms.

The last example is from the battles at NORMANDY in August 1944. The 21st Army Group, in earlier battles, had already made use of search-lights to aid

¹ The examples which follow are a brief summary of extracts from an Article by Major H. B. C. Watkins in the Army Quarterly of October, 1953, on the use of Armour at night.

troops in night attacks. The fact that the ground sloped gradually upwards, was most suitable for anti-tank defences and that over 150 heavy type of anti-tank weapons were deployed to protect objectives which were clearly known to the defenders, made the attacker's task a formidable one.

General Simonds decided to attack at night. In Phase 1, two infantry divisions supported by strong armoured forces were to sieze objectives beyond the main defences. The plan enabled the attackers to have one week for preparation and was the first attempt at mass use of Armoured Personnel .Carriers for infantry.² The night attack did not go entirely according to plan. Some of the infantry columns were delayed due to loss of direction: the artillery barrage did not achieve the desired effect: strong points in built-up areas held out causing further delays; the enemy reacted well and used smoke to add to the confusion. The result was that Phase 2 was consequently delayed—but it was nevertheless noticeable that the move of armoured vehicles at night was an undoubted success and vindicated the decision to launch Phase 1 at night.

THE FALLACY OF INTENSIVE NIGHT TRAINING

There is no doubt of the value of the tank by day. It is therefore easy to appreciate the tremendous advantage which can be gained if even a fraction of this value of the tank could be utilised by night.

The basic tank equipment from the point of view of improving its use at night, has not changed very much from what was in use in World War II. There is no doubt, however, that any average tank crew, given sound intensive training, can learn to move efficiently at night under selected circumstances, without any special equipment.

But it is well to bear in mind that intensive training, do not mean two or three night exercises, carried out in the traditional "good-ACR-orbust" spirit. In fact, today it is unlikely that an armoured regiment, burdened with its normal share of administrative routine, organised sport, technical training and bull, will be able to obtain a high enough proficiency in night operations of this nature, to warrant the introduction of such intensive night training.

Even though the past amply proves that major results can be obtained by using armour at night, we must guard against enthusiastically recommending time-consuming means which are impractical. Moreover, it is important to note that such intensive training and tactics, merely enables tanks and infantry to penetrate strong anti-tank defences, which in daylight would prove costly. Success gained by such night movements, have been achieved, not by using the potentials of the tank itself but by obtaining surprise and by the morale effect of commencing armoured operations in daylight from an unexpected direction, which has rendered the anti-tank defences ineffective.

Although the value of such tactics is apparent, the aim is to devise means by which the tremendous firepower of the tank can be used at night. Intensive night training with existing equipment cannot achieve this.

Another factor which discourages such training, is that although it affords possibilities under special circumstances in the attack, it serves little value for defence operations at night, and defence will be our Army's initial role. If we base our training on such tactics, the use of tanks in defence at night will mainly be limited to a pill-box role with main and secondary armament used on fixed lines or as artillery. Both these roles are of use in an emergency but require no special

² The APCs were adapted from sixty SP gun vehicles

night training, and are wasteful in tank ammunition which will always be in short supply.

The conclusions drawn are, therefore, that some special equipment will have to be devised if Armoured Corps personnel are to be introduced to night operations.

ARTIFICIAL MOONLIGHT AND INFRA RED EQUIPMENT

Artificial moonlight, produced by searchlights, is a great help to tanks, but gives the same advantage to both sides. This lives the tank crew, with their already limited vision, at a decided disadvantage against the numerous infantry anti-tank weapons which could then take a deadly toll of tanks. These disadvantages led to the search for devices which produced invisible light.

Infra red rays form a part of the spectrum and are thus emitted by normal white light. When these are isolated, they are not visible to the naked eye. By the use of a filter, therefore, any light can be restricted to an infra red role.

The use of infra red equipment involves a "sender" which produces the ray, and a "receiver" which detects infra red illuminations. The production of infra red rays is not difficult, but the problem is to produce a high enough power of illumination after filtering normal light. This requires very much more power than would be required for a similar range of white, unfiltered light.

Thus, the difficulty of mounting an infra red searchlight on a tank is the power supply. This can be overcome with special power units but such elaborate searchlights become wasteful as these are easily detected. The detection of infra red rays is cheap and simple. In fact, every infantry man can be provided with an effective goggle-sized detector at a cost of about Re. 1/- per detector. The desired advantage of using infra red searchlights and achieving surprise by the use of tank fire power in direct action will be lost if the infantry defenders are able to stand-to with detectors issued at a liberal scale of one per defender.

DIRECT LIGHT

During World War II, the idea of mounting searchlights on tanks was investigated in great secrecy; the tanks used for the experiment being referred to as Canal Defence Lights (CDLs).

The CDL is fitted with a carbon-arc searchlight mounted within the turret. By a system of reflectors, the light itself was immune to small arms fire and shell fire. Any tank could be adapted to CDL. There were at least two British and an equal number of US Army CDL Tank Brigades operating during the war.

Normal tanks operated during the day and CDL Regiments operated at night, thereby maintaining a continual pressure on the enemy. The detailed method and tactics of working are secret but the data issued on the general effects of CDL are significant.

"Enemy on an objective are completely dazzled by the searchlights to such an extent that, in demonstrations, an ordinary gun tank can motor to within ten yards, being heard but not seen. The effect on night vision is similar to shining a powerful torch into the eyes before leaving the house on a dark night. Accurate anti-tank fire from the objective is virtually impossible. . . . In training it was continually successful and no counter-measures were ever devised that really prejudiced the likely success of CDL. However, it never had the chance to prove itself in battle, which in many ways was a pity".3

³ Major K. J. Mears, 10th Royal Hussars (PWO) on page 184 of The Army Quarterly, Vol. LXXII, No. 2 of July, 1956.

But the original turret-designed CDL was an expensive item of equipment, apparently costing more than the tank itself; and the crew required extensive training to operate the CDL efficiently. Moreover, such CDL tanks no longer had the same effectiveness by day and thus became an expensive item of specialised equipment, fit for one limited role only.

The Americans, endeavouring to eliminate these disadvantages, sought to develop a CDL which could be mounted on to any tank gun by night, and removed when not required. This also had the advantage that the gun controls enabled the direction of both the gun and searchlight on one plane, facilitating operation. It was appreciated that such a device would be vulnerable to small arms and artillery fire, but it was felt that this risk was justified as experiments indicated that it is extremely difficult to hit a searchlight at night, when this is directed at a firer. Apart from the dazzle effect; judging distance becomes guess-work as the ground is not visible. Flickering the beam and moving the tank, added to the confusion of the defenders.

Thus, the US Army produced an 18-inch searchlight on a bracket attached to the 90 mm gun of the Patton tank. The searchlight operated on the power generated by the Patton and the tank crew could remove or attach the light as needed. These CDL tanks were tried out in Korea and appear to have been very successful. Though their detailed method of operation has been kept secret, several accounts of small tank actions at night in Korea have appeared in the US Magazine "ARMOUR" and indicate that the device was effective.4

CONCLUSION

The tank is an expensive weapon which has tremendous value by day. A fraction of a tank's potential, if made available at night, can affect the balance of power on a battlefield.

The use of tanks at night in World War II was restricted to moving them behind the anti-tank defences to gain surprise. Such tactics, though valuable, rely on surprise and not the firepower or other characteristics of the tank for success. Moreover, such tactics can only seldom be employed in the attack and hardly ever in the defence. Such tactics are, therefore, not worth the training required to develope them to a degree necessary for success. Such valuable training time could be better spent on other tasks.

Artificial moonlight and infra red devices are not worth the money and effort required to develop them, as a defender can invariably gain equal if not more advantage, at a much cheaper cost, whenever such devices are employed.

Direct light mountings, which can be removed by day when not required, appear to be the best solution to the problem of using tanks by night. Such lights, if correctly employed, dazzle and confuse the defender, do not interfere with the tank's performance by day, can be operated easily, can be used in all operations of war and appear to have proved effective both in training and in night operations in Korea, in all types of terrain.

The Armoured Corps should begin extensive experiments on these lines. The equipment could all be produced indigenously and the results should more than justify the expense. The only disadvantage is that this would mean that the Armoured Corps will have to work after parade hours.

5 I am told that the Centurion tank generates enough power both for its own needs as well as an 18-inch searchlight.

⁴ It is also significant that elaborate trials on this type of tank continue in the US Army; testing gunnery, fire-control methods, driving techniques and changes in doctrine. Some details are available in an article by Col. Robert E. O'Brien (Jr.), reproduced in Military Digest, No. 37, April, 1958.

ATTACK BY INFILTRATION

By MAJOR R. T. MORLIN

INTRODUCTION

AT the little town of Cassino stands the mighty massif of Monastery Hill. This shoot limb of the Italian Apennines is known to military pundits as a model of impregnable terrain. But these learned historians forget to mention that this is only so far a set-piece and orthodox battle. This great buttress which barred the road to Rome was the main objective of a crack American Corps in that bleak winter of January 1944. With gallantry beyond praise the Americans attacked, but in vain. Two magnificent divisions were decimated on the brooding massif's windswept slopes.

Undeterred by this initial bloody reverse, the Supreme Commander, milked the Eight Army on the Adriatic Front, of two of its best divisions to attempt a second assault. These two great fighting formations, the 2nd N.Z. Division and the 4th Indian Division adopted the same pattern of attack that the Americans had earlier used. They failed. Again they were thrown into the attack and again they failed.

During that proud and tragic six weeks of hope and suspense that marked the second and third battles of Cassino there was only one brief triumphant achievement. On March 17th, two nights after the third attack was mounted, 1/9th Gorkhas won imperishable fame in one of the greatest exploits of the war. This doughty battalion of warrior hill-men had reached their objective, Hangman's Hill, a mere 200 yards away from the Monastery—the keystone to the enemy's defences. The rest of the division were well in the rear still battling for their first objective. How did the Gorkhas get so deep into the enemy's defences? They did so, unwittingly, by infiltration. First a company got through by sheer accident. The next morning their unique position in the midst of the enemy was discovered with amazement. The commanding officer lost no time, and that night, he edged the rest of the battalion up the mountainside platoon by platoon. For seven memorable days and nights the Gorkhas held out on their precarious but advantageous position, hoping that their short and brilliant success would be exploited to the full. That this was not done is another story.

This little isolated action of the Gorkhas carried out silently amidst the raging battles fought around them, gives us much food for thought. Why were infiltration tactics not used as an alternative to the direct set-piece attacks that the Allies indulged in? In that most mechanized war in history, the conditions of ground and weather that prevailed at Cassino negated the employment of modern machines. Battles were fought out between small forces of infantry with rifles, machine-guns and grenades. Instead of senselessly throwing in formation after formation in what seemed suicidal assaults, would it not have been better to have exploited the difficult terrain and adverse climatic conditions using infiltration tactics? Such conditions dictated the requirement of an infiltration force.

The action of the Gorkhas presents us with an opportunity to explore the potentiality of this mode of attack—infiltration. The Japanese and Chinese used these tactics in Burma and Korea respectively, with great success. But the lessons of these recent wars are lost on us, for nowhere in our army do we teach or train ourselves in infiltration tactics. Our current pamphlets and training manuals make no mention of it, except for one meagre paragraph in the 'Jungle GS Publication'

that vaguely advocates its use. Strangely enough this same Publication lays more stress on how to combat infiltration tactics. Now here is a classic anomaly in our tactical thinking. This is because we have for too long considered infiltration as something to defend against. To our conservative minds it is unthinkable to use these 'unorthodex' tactics in the attack.

MEANING OF INFILTRATION

What is infiltration? An old war-time publication, AITM No. 29, describes it as 'Percolation', which means passing or oozing through very small openings; or 'Erosion' which is the act of eating away at enemy defences. The AITM gives an illustration of this by a flow of water meeting in its path an obstacle, or a barrier. In the case of the obstacle, the leading water immediately finds the easiest way, or ways, round, and the flow continues in the general direction required. In the case of the barrier, the leading water will find the weakest spot. Once this has been found the pressure from behind will complete and exploit the breach so created.

Applying this simile to the battlefield, successful infiltration will depend essentially on the active and aggressive reconnaissance of the forward troops. Their task will be to find without delay the weaknesses in the enemy's defence or the easiest way round it.

A Western military historian has given another apt description of infiltration. The defence to be penetrated, he said, is a criss-cross of strong positions and weak ones. Any line of trenches, after bombardment, is weaker at the points where shells have blown it up; there are also, inevitably, natural weaknesses such as dead ground, and covered approaches along which an attacker can penetrate. Imagine this criss-cross to be the iron grating over a sewer, the bars the strong points, the spaces between them the weak ones. Such a grating resists hammer blows, nor can you force even a box of matches through it. But take your matches out, light them and throw them at the grating and some will get through. These will fall into the badly ventilated sewer beneath—the reserve areas—and it blows up.

TASKS OF AN ATTACKING INFILTRATION FORCE

The purpose of infiltration is to deploy strong forces in the rear of the enemy and commit them to attacking lines of communication, administrative rear installations, formation headquarters, enemy gun areas, and hides and harbours for enemy armour, and to seize and control defiles and communication bottlenecks. From strong built-up positions in the rear of the enemy, they should harass and ambush him at every stage and prevent supplies and reinforcements from reaching the enemy forward areas. Last but not least, an infiltrating force may be used to attack the rear or flank of an enemy position in conjunction with a frontal attack.

PHASES OF OPERATION

The phases of the infiltration operation in most cases are carried out as follows:

- (a) Patrolling to discover the extent of the enemy position and the gaps in it.
- (b) Infiltration through the gaps by sub-units and units, avoiding if possible, engagement.
- (c) Establishment of 'firm bases' in the rear and on the flanks of the position to be attacked, i.e. the assembly and preparation for an attack.
- (d) The attack.

ESSENTIAL REQUIREMENTS FOR INFILTRATION

These are listed below:

(a) Weather and terrain

Weather and terrain are important factors. Infiltration is best carried out under conditions of limited visibility. Darkness, fog, heavy rain, jungle and rough terrain will prevent the enemy from detecting the infiltrating force.

(b) Planning

A commander must appreciate if infiltration promises the best chance of success. Infiltration cannot be used against all positions. A well organised, mutually supported defence in depth by a determined enemy may prevent any attempt at infiltration. But when the enemy's defences are over extended or when his front has not been stabilised and is constantly changing, infiltration has the greatest chance of being successful. Objectives and routes are selected based on a terrain analysis, enemy dispositions, and the desire to avoid engagement prior to reaching those areas from which the decisive attack is launched. The attack may consist of two parts—one, an attack by the infiltrating force—the other, an attack by forces in contact with the forward elements of the enemy. Either may constitute the main attack force or the secondary attack force. Best results are achieved when the attack is coordinated fully and when the infiltrating force attacks simultaneously with or soon after the frontal attack force.

(c) Mental attitude

An offensive frame of mind is necessary. The Indian Army today has a defensive attitude towards infiltration. Infiltration is not a technique which can be used solely as a defensive measure to slow up and harass an advancing enemy but also has an offensive role.

(d) Alternative course

Infiltration should be considered as an alternative course of action rather than as an aid which supplements direct attack.

(e) Initiative

Successful infiltration by sizeable forces has been characterized by boldness and the exercise of initiative by all commanders.

(f) Patrolling proficiency

The key to successful infiltration by a large force is the ability of our patrols to locate the gaps in the enemy's defences and his weak points.

(g) Physical condition

Passage through difficult terrain dictates a requirement for the infiltrating force to carry its own administrative support. The infiltrators must be equipped with substantial numbers of automatic weapons, mortars and infantry anti-tank weapons. The requirements to carry several days supplies dictates that troops must be physically tough to endure the hardship to carrying heavy loads over difficult

terrain. Troops must be able to climb, crawl and march long distances over the most rugged terrain and still make a spirited attack.

(h) Surprise

Surprise is essential to success, since the whole aim of infiltration is to advance into unobserved areas which are under enemy control or observation. Every possible effort must be made to ensure that the enemy is unaware of the operation.

(i) Control and security

Infiltration is best accomplished during periods of poor visibility. Roads and tracks should be avoided if possible. Security during infiltration must be provided by friendly patrols and artillery fire to prevent enemy reconnaissance patrols from determining the size and objective of the infiltrators. Flank or rear security during the movement into the enemy-held area is a must. Difficulty of control in rough terrain will, however, often make flank security difficult but some form of flank security should exist even if it is only a few yards from the main body.

OUR RELUCTANCE TO ADOPT INFILTRATION TACTICS

Why is it that we are most reluctant to employ infiltration tactics? The main reason is because we follow too blindly the British Army's concept of tactical theory and doctrine. We slavishly copy their tactics for no other reason than that our conventional equipment is similar to theirs and hence our tactics should be similarly patterned.

There are other factors as well. One is our reluctance to accept what appears to be a gamble, since the failure of an infiltration attack would probably result in the attacking force being cut off, isolated and destroyed. Another factor is a reluctance to lose control. In both cases, adequate planning of reinforcement and communications would minimise the risk of failure.

A third factor is our conservatism. We have been conditioned to accept the orthodox set-piece battle as the standard battle solution to an attack problem. The very first thing we consider in an attack appreciation is to decide what is the enemy's vital ground or ground of tactical importance. As the ground decided on as vital must be captured, an attack must be mounted against it. But the enemy is also capable of deciding which is his vital ground, and so we find ourselves attacking in monotonous regularity his most strongly defended position. We forget that ground remains vital only so long as an enemy can operate effectively on it. If this ground can be by-passed in sufficient depth to cut off sources of supply and reinforcement, it ceases to be vital in a very short time, and may need not be taken by direct assault at all.

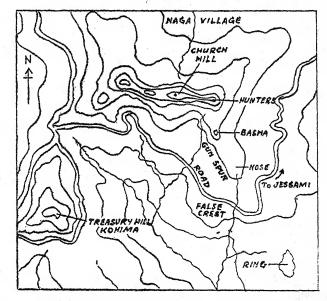
SIZE OF AN INFILTRATING FORCE

The size of the infiltrating force depends primarily on the task given to it. To destroy or capture an enemy's observation post a platoon or a company may be used but if the task is to attack the enemy's depth position in conjunction with a coordinated frontal attack, the infiltrating force may vary in strength from a company to a brigade or even a division.

AN EXAMPLE OF A BATTALION ATTACK USING INFILTRATION TACTICS

In the battle for Kohima in May 1944, two frontal attacks by 33 Indian Brigade against the very strong Japanese defended Naga Village heights overlooking Kohima had failed. It was then decided to attempt to infiltrate onto Gun Spur, 4/1 Gorkha Rifles, located at Treasury Hill, was detailed for this task.

Gun Spur is a feature consisting of two hills, Basha and Nose, both of which were behind and below the main Jap position. From Gun Spur, fire could be brought down on the reverse slope position of



Church and Huntres, which were the two Jap strong points and patrols and ambushes could operate against the Jap L of C.

It was therefore decided to find a weak spot in the Jap defences on Gun Spur, and to infiltrate a force by night, strong enough to hold a firm base and resist any Jap counter attacks until the whole battalion could consolidate there during the next day.

The battalion was allowed three days and three nights during which to reconnoitre the approaches to Gun Spur and to find out the weak spot prior to putting this infiltration plan into operation.

False Crest was a small feature astride the road and was to form the first bound during the infiltration.

Patrols reported no enemy on either False Crest or Nose. Basha Hill was found strongly defended by a series of emplacements and estimated to be held by 40 Japanese. The feature Ring was also held by 30 Japanese in dug-in positions. On the Jessami Road the enemy had established two road blocks, one each a 100 yards East and West of False Crest towards Jessami and Kohima respectively.

As a result of the information obtained by patrols the following plan was decided upon:

- (a) One rifle company was to infiltrate onto False Crest and consolidate astride the Jessami Road. This company was to leave Treasury just after dark. It also had orders to patrol on to Nose as soon as it had arrived on False Crest to make sure that the Japs had not occupied it during the night.
- (b) A second rifle company was to infiltrate onto Nose and consolidate before first light. This company was not to leave Treasury until the

- first company had started to consolidate on False Crest in case the first company was unsuccessful.
- (c) A third company was to be ready to move up to False Crest as soon as the second company had consolidated on Nose, and to be prepared to attack Basha supported by artillery and tanks if the Japs had not withdrawn during the night. This information was to come from the second company who, on arrival on Nose, were to patrol to Basha. It was appreciated that the third company would probably not move from Treasury much before first light.

It was hoped to be able to infiltrate the first and second companies onto their objectives without opposition. If, however, light opposition was encountered, these two companies were still to attempt to infiltrate. If, on the other hand, strong opposition was encountered, the companies were to withdraw.

In actual fact, the infiltration of the two companies onto False Crest and Nose was completely successful, and they both consolidated on their objectives before first light without opposition.

At first light the third company left Treasury with orders to form up on Nose. They attacked Basha from Nose (a distance of about 100 yards), and after some fighting captured the objective. On capture of Basha, the rest of the battalion, excluding mules, MT and non-essential personnel moved up to Gun Spur and firmed in there. The total casualties for this operation were 12 men, slightly wounded. The Japanese were caught completely by surprise and had no alternative but to abandon the position after some resistance.

A few words about how the first two companies infiltrated. The move from Treasury was in single file, because of the very difficult country. Each company halted about 100 yards short of its objective, and a patrol was sent forward from the leading platoon. Soon after the patrol had left, the leading section started creeping up and halted just short of the objective until it was met by the patrol reporting all clear. The sections then moved forward and were quickly built up to a platoon which in turn was quickly built up to a company.

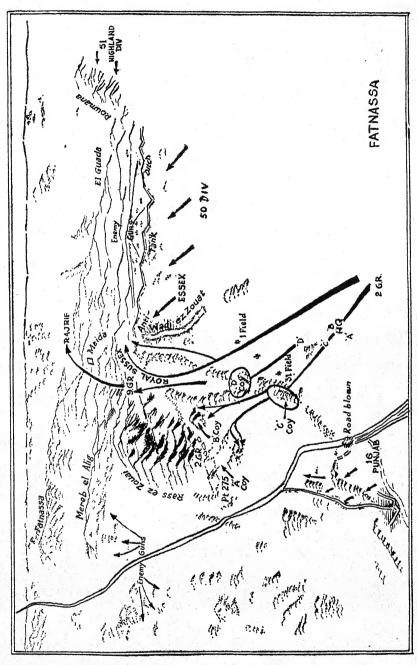
By this method only a small proportion of the company would have been committed had the Japs been in occupation of the feature.

INFILTRATION TACTICS ON A LARGE SCALE

It is a mistake to consider that infiltration tactics can only be employed by small forces or in close country. The Japanese have provided examples of the infiltration of large forces, in the jungle. In Korea the Chinese had with great success infiltrated forces of brigade strength or more. In open country infiltration tactics are best exemplified by General O'Connor's brilliant actions against Graziani's Italians in North Africa. The following example from an action of 4 Indian Division in North Africa admirably illustrates the technique of infiltration tactics in open country. (See Map on the opposite page).

In Wadi Akarit in early April 1943, it seemed impossible to get into the precipitous Zouai Hills held by the enemy. Perhaps the Germans thought so too. But a patrol of 2nd Gorkhas worked into the position and found a gap in the enemy defences and a way up the precipice that led into the heart of the position, and so to the tops of the dominating hills. On a dark night the battalion quietly slipped

THE BATTLE OF WADI AKARIT



through the gap company by company, the platoons working outwards to right and left inside the position. By 02.00 hrs., they had reached the dominating hills and were killing everything they could find. The Sussex passed through the gaps the Gorkhas had made and worked out still wider to the North, and with a series of rapid assaults, seized the vital heights to protect the flank of the 50th Division. I6th Punjab Regiment did the same to the South, and by dawn the 7th Brigade had "opened up" the position to over 2,000 yards in depth. Then 5th Indian Brigade (consisting of 9th Gorkhas, Rajputana Rifles and Essex), infiltrating boldly through, rapidly secured the whole position. The armour was free to go straight through in its turn.

Thus a prolonged and costly assault against a very heavily defended hill position was turned into a one-night-battle solely by infiltration tactics.

CHINESE INFILTRATION TACTICS

The Chinese are highly skilled in the employment of infiltration tactics in the attack. It is laid down in their tactical doctrine that whenever possible they should employ these tactics in conjunction with the two principal methods of attack, i.e. envelopment and frontal. The Chinese employ units of platoon to battalion strength, with a large proportion of automatic weapons, to infiltrate around the flanks of the enemy position which is to be attacked, and establish themselves astride the supply routes in the rear of the defending force. Their role is to prevent reinforcements and employment of enemy reserves and to oppose any withdrawal of the defending forces.

The Chinese infiltration tactics used in Korea were optimised under certain conditions, some of which are listed below:

- (a) Limited or reduced visibility exists.
- (b) Trained professional troops and troop leaders are available.
- (c) The terrain is compatible.
- (d) The enemy is widely dispersed, with gaps between his defensive positions.
- (e) The enemy is not alert, or lacks the means of detecting movement of individual troops.

CONCLUSION

The employment of infiltration tactics in the attack as a means to a quick and decisive end was largely neglected in World War II. We should remember this in training for the next one, for if it is ignored the technique will be forgotten and reintroduced to us by our enemies. In view of the type of terrain we are likely to fight in, and the possible enemy we may clash up against, it is imperative that this type of offensive tactics be implemented in our training.

The technique of infiltration is especially suited to the Indian soldier. Major General De Guingand in his book "Operation Victory" has paid a special tribute to the Indian Army's prowess in this form of attack. Surely we should recognise it for ourselves and make every endeavour to school our infantry in the technique of infiltration. Every infantry commander who learns and understands this technique will discover that on the battlefield infiltration pays high dividends.

ATOMIC WARFARE FOR THE INDIAN ARMY

By "CHIB"

WILL there be an atomic war is the most vital question of our time. People in all walks of life the whole world over shudder to think of the horrors that it may bring and yet Russia, USA, Britain and France are going full speed ahead with the production of nuclear weapons and the means of their delivery. In these countries the study and training for nuclear warfare is in an advanced stage.

In India, we are taking enlightened interest in this aspect of warfare. Any one who is interested can pick up enough information from our publications to study nuclear warfare and keep abreast with the latest developments. It is, however, proposed to discuss in this article if time has not come for us to undertake more organised study and training for this type of warfare.

It is proposed to examine the historical, political and time factors affecting the issue, study the implications of equipment and organisation and then suggest some steps considered desirable for study and training in nuclear warfare.

HISTORICAL

India has a long history of foreign invasions to which there has always been heroic resistance. Some of the feats of bravery and sacrifice find no parallels anywhere in the world and yet invariably period after period in our chequered history militarily we lost to the invaders. The fact that most of the time we spiritually and culturally conquered the invaders and absorbed them in our vast land has helped us sustain our civilisation through the ages. But from professional point of view it does not alter the fact of our military reverses. It is not the purpose here to analyse these military setbacks but merely to draw attention to an acknowledged conclusion on it. The most important military factor always against us was that the invaders invariably used equipments and methods of warfare new to us. Mounted archers and phallanxes of Alexander, highly organised and highly mobile cavalry of Timur Lame, fire arms of Babur, the superior artillery and discipline of the European armies all tell the same story.

Today, there are four major countries who possess nuclear weapons. This number is likely to grow. In the next few years China will certainly have a nuclear bomb. There are many nations who have the potential to develop these weapons. Perhaps, secretly, some of them are.

Some very small yield warheads are currently in production. A .37 Kiloton bomb yielding an explosion equivalent to about 270 tons of TNT brings its effect to a scale familiar in the night long bombing raids of World War II. The reported invention of Calafornium—a new radioactive development makes warheads of very much smaller yields a possibility.

The problem currently under study in the advanced countries is how to fight a nuclear war with only tactical fractional yield nuclear warheads without resorting to mutually destructive megaton weapons.

One some time hears that nuclear weapons are only in the nature of a deterrent. Knowledge that their employment will spell mutual suicide keeps the peace. Consequently countries that do not have them need hardly waste their time on a

method of warfare, which may never be employed. In this two basic factors are overlooked:

- (a) That the techniques for nuclear warfare essentially require a very high degree of mobility and obviously this is a great asset even in conventional warfare.
- (b) That an unscrupulous nuclear power is in a position to blackmail a non-nuclear power.

Once again, we are in an oft-repeated state of our military history. A number of nations in the world are developing a new technique of warfare which may well be used against us.

POLITICAL

As a matter of national policy we are against the production and the use of nuclear weapons. Even the nuclear nations acknowledge the wisdom and morality of this far-sighted policy. Studying nuclear warfare and also training for it is, however, not contrary to this policy. Our national policy is against war of any nature but that does not stop us from having an army or from training that army for war. These are plain and simple facts of self defence.

The question that straightaway comes to one's mind is, is there a potentional nuclear threat to us from any quarter? The answer is 'No'—at least for the immediate future. Therefore, it will be wrong for us to completely change over to a nuclear posture; in any case with our present economic resources and the wise policy not to have nuclear weapons it would be unrealistic and impracticable and wrong. But it is not so easy to predict the situation in 1965 or 1970. One hopes that there will be no unclear threat even then. But if there is, which, considering that we have some neighbours with dispositions not very friendly to us, is quite possible, then a policy of serious study and training for nuclear warfare will pay handsome dividends. It will save us the scramble to the nations who know it and may or may not be disposed to teaching us. And in any case, as would be discussed later, technique for nuclear warfare and mental readjustment it is not a matter which can be adopted in a year or two.

TIME FACTOR

USA and Great Britain are training in the use of nuclear weapons for over a decade. It is no exaggeration to say that they are far from knowing the right answer. Perforce, there can be no practical experience. What is more, they radically differ in their tactical doctrine in the use of tactical nuclear weapons. The difference is due to the different equipment available to each Army, difference in their national temperament and difference even in their principles of war. In this there is a lesson for us. We are the second largest nation in the world. We are temperamentally different to any of the nuclear nations. There are limitations on the equipment that our nation can afford us. Therefore, if we have to train for nuclear warfare, we have to do our own thinking. Imitation will not suit. And to do that takes time—not one or two years but perhaps decades. We can study nuclear warfare and impart realistic training even without possessing nuclear weapons. In this aspect we are no worse than the nations who do have them because mere possession of these weapons does not mean that one can use them for training.

From the discussion so far it would appear that the time has come when we must start studying and training for nuclear warfare.

CHANGES IN ORGANISATION AND EQUIPMENT

Fire and movement will continue to be the basis of nuclear warfare. To keep pace with the tremendous fire power which the nuclear weapons provide, "mobility" of an army has to be increased so that it can "disperse to live and concentrate to fight" without offering an attractive target to the enemy. That means:

- (a) changes in the organisation to make formations/units more compact; changes in the equipment to make it light and yet more effective;
- (b) reducing the links in the chain of command to reduce time in passage of orders and information;
- (c) improving means of movements, i.e. cross country armoured vehicles, aerial movement and so on;
- (d) better means of communications for exercising command and control;
- (e) revision of administrative system in order to keep pace with the mobility of the fighting forces.

ESSENTIAL STEPS

Reaching the above changes and also to carry out the necessary improvements has to be preceded by certain essential steps. First essential is that our officers acquire the necessary basic knowledge about nuclear warfare. This in effect means knowing in detail the effects of various sizes of bombs and methods of their delivery and then be able to employ them to one's maximum advantage.

This knowledge automatically gives rise to evolution of techniques for the employment of troops in the defensive as well as the offensive.

The techniques then suggest the organisation and equipment that are best suited to them. And conversely if organisations and equipment cannot be changed speedily then the techniques have to be suitably modified. For example, the British Army believes that the best way to win a nuclear tactical battle is to fight its decisive phase in defence on an obstacle. With the size of forces and the equipment available to them this to them appears to be the best way. The Americans, on the other hand, with their better equipment and more streamlined organisation have more mobility and consequently believe in the offensive.

It emerges that our first step should be to impart detailed knowledge to our officers. This can best be done by considerably increasing the time devoted to it at the Academies, the Army Schools and the Staff and National Defence Colleges. Along with this we should evolve our own doctrine to fight a nuclear battle with whatever equipment our country can provide us. This is best done if the task is assigned to a body exclusively responsible for this purpose. For example, the British, American and the Canadian Armies have high powered directorates of "Combat Development" for this task.

The above caters for the training of leadership, evolution of necessary doctrines and changes in the organisation and equipment. Concurrently troops should also be trained with the basic aim of averting panic when these weapons are actually used against them. An average soldier must be prepared to protect himself against psychological and physical effects of a nuclear bomb. This can best be

achieved by making them familiar with the effects of nuclear weapons through the medium of lectures, films and demonstrations. Using a combination of various explosives it is now possible to produce an explosion with a characteristic fire ball and a mushroom shaped pillar of smoke to simulate a nuclear explosion.

Collective training is then only a step ahead.

CONCLUSION

To defend the country it is essential that we prepare ourselves for the possibility of having to face a nuclear threat. Not to do so would be to ignore the lesson of history and the facts of present day life. If in future no such threat materialises then study, training and any possible revisions in our organisation/equipment will not be wasted; they will continue to be of tremendous advantage even for conventional warfare.

In the light of our policy not to possess nuclear weapons and our limited resources it would be wrong and unrealistic for us to think of changing over to a nuclear posture. All that we should do is to study and train for nuclear warfare in an organised manner so that if called upon to face an unscrupulous nuclear aggressor we are not found wanting. This means:

- (a) Devoting more time to nuclear warfare at our Schools of instruction.
- (b) Training troops not to panic when these weapons are used against them.
- (c) Holding nuclear exercises with troops.

We should also establish a directorate of "Combat Development" to evolve indigenous tactical doctrine based on the equipment our country can provide us as also to influence the design of equipment which will suit the future tactical requirements.

It takes time to develop and adopt techniques for nuclear warfare. Time to start is now.

AIR SUPPORT IN COUNTER-GUERILLA WARFARE

By COLONEL LOUIS ANDLAUER

ALTHOUGH many studies have been made of spectacular air support in counterguerilla warfare, such as parachute dropping, helicopter assault and bombing of guerilla bases, the normal air support is taken for granted by the armies involved in counter-guerilla warfare and, therefore, no information on the value of such support, as experienced in operations by French Forces, has been passed on to other armies. Naturally, the latter have not so far realised the efficiency of the Air Force in such operations.

RECONNAISSANCE SUPPORT

The use of cavalry has been outmoded, as this function is met in modern warfare by armed vehicles. But in counter-guerilla warfare, it is not practical for the armed vehicles to fulfil the role adequately, because of their very limited field of vision and movement in difficult terrain. Hence its responsibility has now devolved upon the Air Force.

Aircraft do constant reconnaissance, especially over the routes normally used by guerillas and by so doing restrict the use of these tracks to the dark hours of the night. But when for one reason or another the guerilla troops or their supply are seen during day time on these routes, usually too far away for a ground troop garrison to intervene rapidly, arméd aircraft go into action.

To avoid any mistake the order of fire must be given by the garrison chief responsible for the particular area in which this guerilla party has been sighted.

When troops are in contact with guerilla forces, one of the difficulties is to estimate the strength of this guerilla force, and to keep contact with it during the manoeuvres because of the more rapid progress of these guerillas in difficult terrain.

The Air Force is given this job and observation planes circle round the zone. sight guerilla parties and follow their progress.

As mentioned before, this progress is often very rapid and does not give time for the ground forces to move into position and tackle the situation. So, light armed aircraft are called in and asked to shoot at guerillas in certain areas so as to restrain their movements. It has been proved by experience that when armed aircraft are around, the guerilla parties do not desintegrate into individual parties as they usually do when they meet strong opposition but stay together and move very slowly indeed.

TRANSPORT SUPPORT

If garrisons are too far away to intervene in time, reinforcements are brought in by helicopters on the line of movement of these guerillas. Heavy helicopters and troops of the reserve can be called in and their time of intervention can be around one hour if they are on the alert. Sometimes the friendly troops find themselves in contact with a guerilla force which they cannot tackle alone: either they need small reinforcements or some heavy armament against strongly entrenched guerillas. Small reinforcements in personnel and armaments are brought in quickly by small helicopters (ALOUETTE) which are at the disposal of the Air Commander at the division level.

The weight capacity of these small helicopters which vary with the amount of fuel carried is, in normal conditions, of 4 men plus the pilot. A small section

armed with 75 m/m recoilless guns or SS. 11 guided missiles, or explosives, or tear gas, can be brought in, in less than an hour. Sometimes it is only ammunition, or food, or drink, or clothing which is required due to delays in tackling the guerilla forces. These are sent by small helicopters and this enables the action (which otherwise would have to be abandoned) to go on.

This transport support role allows a military post to be installed in a position which is very interesting tactically but has a very poor and insecure line of supply. On average a soldier needs two kilograms of food and ammunition a day most of which is not perishable and therefore can be brought in by road convoys at long intervals but meat, fruits, vegetables and mail must be brought often and these goods average between 200 grams and 300 grams a day. For a 150-man party that means 300 kilograms per week which is easily brought in one rotation by an ALOUETTE thus economising each week an armed convoy composed of a number of lorries, a few half trucks, some jeeps, perhaps a protection aircraft and a few dozen men who would do nothing but go and come back in a day which would therefore mean no operation on this day and may be the next, because the troops are tired.

This procedure of systematic supply by helicopter has been found so interesting from the economic point of view that it has been progressively extended to a number of isolated posts and needs only a few hours per month of helicopter flying. This flying is of course arranged so that another mission is done en route, either for liaison or for evacuation of the wounded. Mention must be made of these evacuations of sick and wounded by helicopters which save lives and raise the morale of the troops.

FIRE SUPPORT

When a friendly party is involved in an ambush or clash with a stronger guerilla force it must be given immediate fire support; and fire support from aircraft is used because it can be provided faster and with greater precision than any other.

To be able to provide firing air support as quickly as possible routine duties such as protection of convoys, reconnaissance, etc. . . are so arranged that two armed aircraft are always in the air. Therefore, when needed, they can leave the first mission at once to come to help, while their relief takes the air. The time required depends, of course, on the size of the zone of action but is around 10 minutes.

The pilots are trained to fire with great precision especially in direction; army personnel are trained to signal their positions by white and bright red panels and targets 50 meters in front of troops in position have been frequently hit.

The aircraft must have very good visibility, and be of the slowish type 250 Km/h—140 knots and armed with heavy machine guns or better 20 m/m cannon (the explosive shell of this gun is very effective for antipersonnel purposes in a circle of 2 metres around impact). If the situation requires more armed aircraft are flown to the scene of battle and can be of heavier type armed with heavier armament, jets (OURAGAN) with rockets, specially the 37 m/m which is of great precision due to its speed, and may be carried and fired too by small aircraft.

LIAISON SUPPORT

Troops engaged in difficult terrain very often do not know the exact position of all their parties and, therefore, accidents and mistakes can occur. The observation aircraft flying above such a situation sees the different elements moving and gives information to the ones concerned and thus such accidents and mistakes are avoided.

Furthermore, it sometimes happens that wireless liaison on the ground is hampered by masks and the liaison airplane by retransmitting the messages keeps the contact between the operation Commander and his troops.

The transport by helicopter of military or civilian authorities brings them directly in contact with reality and facts which are not screened by the usual reception committees organised in their honour.

EXAMPLE OF AIR SUPPORT IN OPERATION

Information given by the population as to the presence of a guerilla force resting in a small wood led to the launching of an operation. What followed is discussed in the sketch overleaf.

Troops were to move towards this wood A, starting before nightfall and be in position around this wood A before daybreak. General reserve troops were to be brought in by 8 heavy helicopters (10 men each) in 4 rotations and were to enter the wood.

But due to lack of secrecy or too much noise the guerillas realised that something was up, so they moved out of this wood A during the night and the operation found . . . nothing. However, during this time observation planes were observing the country ten miles around and saw at 07.00 a very important movement of cattle in a particular area B. As these flocks and herds are sometimes used by the guerillas for reconnaissance purposes, it was decided to investigate this and 4 heavy helicopters flew in 40 men on a peak C near this cattle and some of it moved sideways.

The observation planes finally spotted two men in uniform who immediately took cover under trees D.

Troops were given the order to march towards this spot D and helicopters brought more troops to cut the possible retreat routes in E.

While an armed aircraft patrol was called and by mock attack on the cattle drove them to a village F so that they could not be used as scouts.

Another armed aircraft patrol was to fly around the area and try to spot men in uniform. Some were seen trying to climb away by a ridge H and after making sure that it could not be friendly troops or civilians the Commander of the operation ordered this patrol to fire if anybody was seen trying to cross the ridge H. After a few bursts they came back around point D. Then troops were brought in on the ridge H by helicopters.

At 11.00 a new operation was ready to start. Troops were in position to stop any escaping movement from the guerillas and assault troop ready for action.

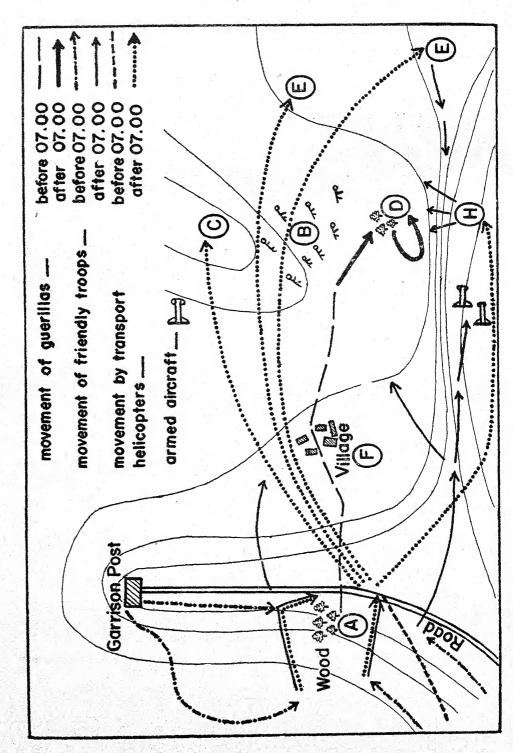
This particular guerilla party ceased to exist before nightfall.

This example shows that—

- (a) observation aircraft can trace and find the enemy.
- (b) armed aircraft can stop the progression of guerillas.
- (c) helicopters can move troops quickly into position so that an operation can be engaged in time so as to finish before nightfall.

EXAMPLE OF AIR SUPPORT IN AMBUSH

A group of our soldiers was moving in very difficult terrain (slopes 60% to 70%, differences of level 400 to 500 metres). They were suddenly stopped by machine gun fire and strong rifle fire. The Captain commanding the party was



killed along with 6 soldiers and about a dozen wounded. The second-in-command immediately called on R/T his garrison post but due to mask effect of the hills was not heard so he sent its message "in the Air" "Callsign—position—met by strong enemy forces need immediate support". Then switched to the "Air support" wave length and called but no reply—again he sent his message "in the Air" and went on both frequencies.

A convoy en route had got the message but his reply was not heard but passed it on to the plane protecting it, who flew straight away to this position, leaving his routine job, and called the Air Commander who ordered aircraft in the air to go to the scene of battle and gave order so that their relief took off immediately as well as an observation plane.

One aircraft was above the battle about 6 minutes after the call and saw the friendly troops with their red and white identification panels and guerillas troops beginning to assault. Not being absolutely sure he made a mock attack on these guerillas while asking the Commander of the friendly party if he could fire on the next pass. The answer being affirmative he dived and fired with the result that the assault was stopped. He was then joined by another armed aircraft and both circled around.

The ground troops signalled that another guerillas party was at another place. This information was given to the arriving observation plane, who spotted it, marked it with smoke grenade and this party was attacked by the armed aircraft.

During this time reinforcements were coming to the scene and counter-attacked.

Thus, by rapid fire support, the friendly party suffered only a few casualties and the guerillas in this action suffered heavy casualties.

This is not only an example of the work done by armed planes but serves to emphasize the importance of telecommunications in this type of warfare.

This Air support is there, but to be of any use, the army officers must be convinced of its possibilities, this does not take much time in actual operation but can be done with less risk and more efficiency if it is taught at school where civilians are turned into officers.

To be effective, immediate wireless liaison is a must between any party going out and its garrison or any garrison and the Air Commander.

Any party going out must have a wireless set, for liaison with its garrison and other parties and for liaison with planes.

CONCLUSION

Counter guerilla warfare is a very different affair from classical or other warfares and Air Forces must be ready to change their tactics and use adequate aircraft and helicopter to meet the requirements. But the Army must also accept a change in their habits and officers must be trained and formed to the habit of calling by direct radio link the Air support which they need.

If these conditions are fulfilled, guerilla actions such as attack on posts or an ambush will be made more and more difficult, their movements will be made more and more precarious while the friendly troops by sending out smaller and lightly equipped units may cover more ground with more efficiency and safety.

ON BUILDING OF MEN OF WAR

COMMANDER M. R. A. RAO, IN

Ship-building is generally regarded as a severely practical industry, carried out in sombre surroundings and involving apparently elementary mechanical operations on materials in the rough state and unattractive in appearance. Generally speaking shipyards are situated in large industrial centres close to rivers or tidal waters whose sole claim to romance lies in their names and possibly their history. However, as if to compensate those whose daily work ties them to the yards, shipbuilding involves at least one occasion, the launching of each ship, when all may relax and enjoy for a few minutes the spectacular part of their work being used for pageantry and ceremony, the accustomed roar of machines being forcibly silenced to give way to music and often to the solemn stirring echoes of religious service of dedication. On these occasions, too the dull masculine atmosphere of the shipbuilding berths is enlivened by the bright colours of the dresses of many distinguished lady guests, and by the crowded spectators who give the yards a holiday atmosphere as they press forward towards the vantage points. Usually the wives and families of the men who have worked on the ship will be there in hundreds to take special pride in a personal creation.

Great ships mean great occasions, but whatever the size, usually the main elements of ceremony are always there for, when a ship is launched there is a link forged between the ship and her sponsor and between the sponsor and the ship-builders. The significance of this link can never be forgotten, for, it is deep rooted.

In these days, a few yards have been built on ground unsuitable for traditional launchings, and thus ships must be built there in dry docks which can be opened to the sea, allowing vessels to float up from the keel blocks and other supports. In a few other establishments ships are built in water-tight sections; perhaps a stern section first is assembled on the berth, launched and towed to a fitting out basin, to be followed in a few months by the Midship Section and then the Bow Section. The three units, or there may be more, are then taken into a graving dock and joined together, eventually floating out as one complete ship. Some ships are built where the waterway is not wide enough to allow a conventional launching or, strange as it may seem, sometimes a ship is too weak to stand the strain of being launched end on, when a most spectacular expedient is followed, whereby it is allowed to slide quickly sideways, usually dropping bodily the last few feet with an impressive surge of water and an alarming roal.

However, ships may be built and by whatever means they are launched, it is right that there should be celebration on such occasions to impress on our minds the importance of the event.

We in India are possibly on the threshold of such celebration for, with the rapid advances that are being made in the field of industry as a whole and the defence industries in particular, it is but opportune to lift the veil on the subject of construction and fitting out of warships from within our own resources. While our shipyards may in the eyes of the more established ship-builders of the world appear to be in their infancy, their notable record since the attainment of independence cannot possibly be ignored. Also minesweepers of Bangor class were in fact built in our yards during World War II. Hence it can be said with confidence that the infant has started to walk, and walk in the right direction. This is without prejudice to our ancient history and with due regard to the fact that the Naval dock yard at Bombay in the late 17th and early 18th centuries did build superior ships of Teak and Sail which later served with distinction under Nelson's flag.

It is not only when a ship is launched that a link is forged between it, the sponsor and the builder. The bringing together of the creators and the users commences at the very earliest stages of a ship's design, for, almost each ship is "made to measure" and thus incorporates features specially suited to the user. Thus the design of a ship and more particularly a man of war is the outcome of the joint work of Naval constructors, Marine Engineers, Electrical Engineers, Draughtsmen, and a host of other departments. In its preparation weapon designers, scientists in experimental establishments and the users represented by the Naval staff have a very important part to play at all stages.

The first step in the design of a new warship is to decide upon the main characteristics of the functions which the ship as a whole is required to fulfil. For the designer's purposes this means the numbers and types of the principal weapons and equipment, the range and the speed at which the machinery and fuel carried by the ship will take her and the number of officers and men who will have to be accommodated on board.

The above look simple enough but in actual fact there is much more to it than a mere statement of what the Naval staff consider the new ship should look like. Just as anywhere else, in the realm of ship design also, there are always restrictions, particularly financial ones, on the size of new ships and therefore on the incorporation in them of all that might be thought essential or desirable. In the selection of what is to go in, a great variety is possible; for instance in the proportion of offensive to defensive quality or in the relative claims of equipment and machinery which provide the motive power.

To help decide these rather conflicting and possibly confusing issues, studies are usually prepared in the form of outline drawings and particulars of ships that could be built to carry out the tasks the Naval staff have in mind. These studies are necessarily approximations and are often based on very early information about future weapons so that a large element of judgment enters into their preparation.

Having thus settled the main features, the Naval staff have to develop from the outline of the new ship's qualities a statement in detail of their "Staff requirements." In this process also the designer has to make his contribution by advising whether the demands made by the Naval staff are practicable. The real work of designing the ship can commence on a firm basis only when the fully developed "staff requirements" are available.

The main dimensions of the ship are arrived at by selecting tentative figures and working out how they fit the requirements. The weight of the ship and all it has to contain must match the buoyancy in such a way as to give the desired trim and stability. Sufficient space suitably disposed has to be provided for everything that goes into the ship and the under water form must be such that minimum propulsive power is required to give the desired speed. Free board, structural strength and any limits set by the sizes of docks and harbours are among other important matters which affect the ship's main dimentions. The adjustment of anyone of these factors reacts on all the others so that a repeated process of trial and error is necessary. Each trial investigation enables a closer approximation to be made until eventually practicable dimensions are arrived at to the satisfaction of the designer.

The first approximation to dimensions is obtained from experience with ships of similar type and speed after making due allowance for any known differences. The early attempts at displacement and length will give an indication of the power of the machinery required to attain the designed speeds and therefore the sizes of the machinery spaces and the number of shafts. These arrangements

together with space required for the storage of ammunition and other essential spaces are drawn out and necessary adjustments are made to dimensions.

A closer examination is now possible by estimating the weight of it hull, armour and other protection, machinery, equipment and so on based on the new dimensions to ensure that the total weight is commensurate with the buoyancy of the proposed hull form and produces the desired trim and stability. The process of calculation and drawing needs to be repeated several times coupled with an examination of accommodation and other space requirements. Investigation is also necessary into the longitudinal strength of the ship wehn subjected to bending in waves, and into the refinement of the underwater shape. Concurrently tests in an experimental tank to check the suitability of the hull form and to determine the appropriate propeller characteristics are also carried out on models.

Eventually a statement of particulars of the new ship is submitted to the Naval staff as a sketch design for the new ship. It is no longer a rough approximation but is an as accurate forecast of the ship as can be expected and is supported by calculations of all the essential features. It is accompanied by an estimate of the cost and the time required to build the ship and an assurance that the "staff requirements" will be met.

Further proceedings depend on whether or not the above is approved by the Naval staff. If further development is approved on the above basis, a set of building drawings on a larger scale is evolved by elaborating the sketch designs referred to in the earlier paragraph. These building drawings not only show the general arrangement of the ship and propelling machinery but also an outline of the arrangements for electrical power supply and distribution, the important details of construction, armour protection if any and the rig. A drawing which determines the geometrical form of the hull is also included together with a set of specifications prepared concurrently with the building drawings. To these is added a list of items which the Navy may undertake to supply for fitting into the ship, all of which put together constitute the design element in the documents which form the basis of the contract between the Government and the builder.

With the placing of the contract for the ship, the design work enters a new phase in which the ship-builder and the main machinery contractor make a big contribution. Before ordering materials, and undertaking the actual work of construction, working drawings must be prepared. This is no mean task, as a few building drawings have to be expanded into some thousands of detailed drawings.

Owing to the complicated nature of a modern warship, the contract documents have to be supplemented by a large number of explanatory drawings prepared by Naval establishments for the guidance of ship-builders in interpreting the intensions of the Naval staff in detail. These are forwarded to the builders as soon after they are prepared and this process continues as the details develop. Sometimes the contractor is required to make a full scale mock-up of certain important spaces in order to secure the best possible layout.

To ensure that the design intensions are being realised, to maintain control of weight and also to enable any necessary changes to be embodied, the contractor is required to submit most of his working drawings for approval by the Navy. It may, on the face of it, appear that this procedure is rather a time wasting formality from the ship-builder's point of view. Ship design is a process of evolution of details as the work proceeds and while it is going on, much of the equipment to be installed is under development also, as a warship must be "up-to-date" in its weapons and out-fit. Changes often have to be made to the ship arrangements, as more becomes known about the equipment and the structural requirement of the ship may in turn react on the arrangement of the equipment. All these adjustments

though they may appear to be vicious circles have to be embodied in the working drawings and naturally involve an element of time, but they are an inescapable part of the design work. In the latter stages of construction, further changes may become necessary as a result of experience gained during trials of equipment.

Enough has been brought out to demonstrate that warship design is far from a straight-forward process which merely requires a set of "staff requirements" to settle everything for the designer. Yet another contributory factor to the element of change is that the "staff requirements" themselves are subject to change at any time while the ship is being designed and/or constructed. These changes are mostly brought about by changes in the methods of Naval warfare which is in a state of rapid development as new weapons, counter measures and means of communication are being perfected. The longer a ship is in the design and construction stages, the greater are the chances that changes are likely to be necessary.

Changes in design of a ship which may be as frequent as a quick quivering aspen, in addition to involving delays puts up proportionately the overall cost of construction. Conversely, delays not attributable to design changes are prone to encourage changes in design on an after-thought. Thus, the element of delay produces more or less a chain reaction, and hence it will be but expedient to minimise causes which promote such a situation. Adequate co-ordination between departments concerned both within and without the Navy and the Government may to a large extent obviate this; failing such a course very little indeed can and will happen and possibly the proposed ship may only exist on paper until it is no longer required; the net result is infructuous effort and possibly frustration.

One other significant aspect that may possibly be overlooked as the fact that once the design sketches are submitted to the Naval staff together with specifications, it is incumbent on them to arrive at a decision whether or not the sketches are acceptable. On this one decision hangs the entire future of the proposed ship and as such it is a responsibility of no mean magnitude which has to be assumed by the Navy on behalf of the Government.

Considering that the ship-building in India is still in its infancy, the designing of a modern warship is possibly a step to be taken not in the immediate future. At the same time a start must be made somewhere and possibly some time very soon to build warships. A compromise has, therefore, to be arrived at and the conflicting situations of our relative inexperience and the urgency of the Navy's requirements for new ships have to be reconciled.

Such a compromise may possibly be arrived at by first of all deciding whether or not a ship to be built in the Indian yards will carry equipment by way of armament and machinery similar to those installed in the existing ships of the Navy, for warships being made to measure are built round their equipment. Based on this decision, it naturally follows that the design of such a ship may well conform to the ones already in the Naval service. The apparent advantage in adopting this compromise would be the fact that we know all about the existing ships and their equipment and as such no further effort need be expended in learning; on the other hand all effort can be concentrated on learning how to build and fit out such ships. Yet another advantage is that possibly the designs for these ships are already available with us and would require no further major changes.

As opposed to the above compromise, should the query be raised as to whether the equipment by way of armament and machinery as are provided in the existing ships of the Navy are indeed "up-to-date" and whether such equipment can, in fact, effectively deal with the possible targets that may confront them in times of war, then, a certain amount of rethinking is necessary. Perhaps there are in the world market better types of armament and machinery which weigh far less and

possess more offensive power and which require a lesser number of men to work them, thus increasing the range, ammunition carrying capacity and providing better living conditions aboard. These are, should such weapons exist, very weighty considerations and cannot be overlooked if our Navy is to be "up-to-date."

The term "better" is no doubt a relative expression and can only be used in comparison with something else. The something else is naturally the equipment fitted in the existing ships. Therefore, if this line of thought is to be encouraged, first of all, an analysis is necessary to compare the offensive and defensive capabilities of such "better" equipment against what we already possess. This process, if it is to be carried out in the orthodox manner, will call for extensive trials. Precedents, however, exist where the claims of international manufacturers of repute have either been accepted or limited trials carried out to confirm such claims, because facilities do not exist in the country to carry out such extensive trials in the orthodox way. Nothing can, however, happen without there being a requirement or necessity for such "better" equipment on the part of the Naval The first step, therefore, would be to study the equipments as are available in the International market against those that are already in service in regard to their performance, destructive, offensive and defensive powers and so on. The secondary aspects which will have a bearing on the adoption of such "better" equipment are the possible changes in tactics, training of personnel, maintenance and logistic problems. Above all the element of cost also plays an important role in such contemplated policy changes.

While evaluating the secondary aspects and the cost aspects, it must be borne in mind that the design and performance of weapons and equipment are undergoing changes continually depending on the role such equipment has to play and the type of target each of such equipment is expected to deal with. Changes must therefore be accepted as they are inescapable. Even as it is, there is a significant change in the type of equipment fitted in the more modern ships of the Navy as compared with those mounted on ships of World War II Vintage. Therefore, it is obvious that without anyone being actually conscious of such changes they are being introduced into service every time a new ship is acquired. Therefore, the tendency towards undue caution and the apparently negative approach to changes in equipment policy are in fact fallacies. There is also likely to be a school of thought which may tend to feel that it is unwise to have ships in the fleet with different types of equipment, as such will lead to non-standard pattern of maintenance and logistic problems and that the fleet will consist of a line of ships each different from the other. While this argument is formidable on the face of it, it at once falls flat when once the superficial covering is removed, for, are not the existing ships in the Navy already heterogeneous? This cannot be avoided if the Navy is to have more and more modern ships and at the same time it cannot afford to scrap the older ones. While such is the case, why then the tendency to avoid looking beyond what we already have? Does it then not amount to stagnation and possibly will not the Navy over the course of the next decade find itself a further decade behind other Navys of the world? Above all will not the Navy be out of date?

While talking of modern ships and modern equipment, one has to be very careful of possible platitudes. There is an increasing tendency possibly based on inconclusive knowledge of conventional weapons to overestimate the usefulness and performance of missiles whether guided or unguided. Generally speaking in the field of armaments, every item used by any fighting force has a definite role to play. While it may be possible that a certain amount of interchangeability exists in the spheres in which weapons can be used such interchangeability can never be universal. Such a universal weapon has yet to be conceived. Therefore, a word of caution is necessary on the subject of missiles as a whole. It is not denied that

missiles mostly guided are an essential part of any modern fighting unit. It is not because that such missiles are the fashion. On the contrary certain types of modern targets lend themselves more effectively and possibly more easily though at an enormous cost to be engaged by missiles. Also tactics employed for surprise attack using nuclear warheads are more easily devised when long ranges are involved, when missiles such as ICBM are employed. But there are certain spheres where the conventional weapon cannot possibly be replaced by anything that has been so far invented or is known. A typical instance of such a case is that of engaging aircraft at close ranges, and in Naval warfare particularly, aircraft used for delivering torpedo and rocket attacks. While it is possible that some missiles are in the process of being developed to deal with such a target, the theoretical considerations of rate of change of range and bearing and the rate of fire required are such, that no known missile exists to cope with this problem satisfactorily. Even should a missile be invented for this purpose, its guidance will present problems as cannot be solved within the short time when the target is on the attacking run unless this missile can be launched in the "future" position of the target and is capable of homing itself on to it. Even so, limitations are brought about by the fact that aircraft carrying out close range attacks do not enter battle singly. In the present stage of development of armaments the only answer is a radar controlled conventional automatic weapon of a fairly heavy calibre of between 40 and 60 mm and longer effective range and capable of delivering a very rapid rate of fire, the ammunition being fitted with proximity fuzes.

One other important aspect which has to be borne in mind in the selection of equipment, particularly armaments to be installed on ships, is the question of commonality and interchangeability of component parts over a wide range of similar weapons. This aspect is important from the logistic and manufacturing points of view. We shall not rest content unless we are in a position to manufacture in India as many items as are humanly practicable. This statement, in itself, may appear to be a platitude, but there is nothing to prevent anyone approaching this problem on a rational basis so that, efforts are simultaneously made not only to build ships but also to manufacture the equipment that goes into them. Facilities for such manufacture in collaboration with foreign principles will no doubt be available and under these circumstances while considering the prospects of building warships in our own shipyards, we must not loose sight of the necessity to manufacture all the main and ancillary equipment that go into a ship. Planning, therefore, nas to be on these lines and not short sighted. This naturally means we should carefully choose not only the type of ship that we wish to build for the Navy and also the entire range of equipment which goes into it but also the collaborators who will help us achieve our aim.

THE AIDE DE CAMP

By AMOS

INTRODUCTION

THE problem of finding suitable AsDC has become quite acute and will continue to be so because a tendency is cropping up regarding this appointment with considerable disfavour both amongst officers who have to perform these duties as well as by their immediate superiors, who consider that an ADC's appointment is not necessarily a feather in the cap for a promising young subaltern.

The aim of this paper is to discuss the functions of an ADC in relation to the career of a young officer.

HISTORICAL BACKGROUND

It is interesting to note that an ADC is a very old institution in almost all armies of the world. The very fact that no suitable English equivalent has been found for the word, leads one to understand that the institution came to England with the Normans many centuries ago and has continued to this date. In almost all armies general officers in command of troops, and heads of States have been provided with young officers as Aides de Camp from time immemorial. History is replete with the names of distinguished officers who served in their younger days as AsDC, and who obviously must have benefited by their experience because in their turn, they rose to high eminence in their profession. The names of Admiral Mountbatten and General Patten come easily to mind from amongst those who rose to distinction in World War II.

In days before the advent of wireless, and other modern means of communications, it was the ADC who transmitted the General Officer's word of command on parade by means of visual signals with a lance from on horseback. The ADC thus might be said to have been the mouth-piece of the General Officer on parade. In World War I, AsDC were authorised field boots and brass hats, normally associated with officers of much more senior ranks than subalterns and captains, which are the normal ranks of AsDC. All this was not for mere show alone, but went to proclaim the fact that howsoever junior an officer was, while he was working in the capacity of an ADC, he had to be entitled to the respect and status of a much more senior officer by the mere fact of the tasks he was performing. Even today, the AsDC to the President, in full dress uniform do not wear badges of rank but are authorised georgette patches and scarlet bands with the State Emblem, as worn by Officers of the rank of Colonels and Brigadiers.

But in spite of these vestiges of prestige, the actual treatment meted out to AsDC is far different in relation to the position they are supposed to hold. This is due to some very grave misconceptions.

There is also the tendency to make much of an officer while he is occupying the position of an ADC—currying favour would not be too strong in some cases, but once he gets back to normal duties in the regiment or the staff, to "take it out of him" "forhaving had a good time while an ADC". Many of these misconceptions exist because little is really known about the functions of an ADC.

FUNCTIONS

The functions of an ADC are hard to define precisely as they depend very much both upon the officer he is serving under as well upon himself, but the basic

fact remains that an ADC is a personal staff officer of the General Officer, or the high civil dignitary, and once this basic fact is understood much of the misunderstandings attached to this appointment should be cleared.

The first function of an ADC is to remove minor irritations out of the way of his principal, so that he can attend to his primary function without the distraction of having to deal with these minor problems. For instance, an ADC should be quite capable of directing a General Officer through traffic on to his destination so that during the journey, the senior officer could either relax, and be thus the fitter at the end of the journey to tackle the problems which would arise there, or he could continue discussion or any other work with other staff officers or commanders who might be travelling with him.

Similarly, an ADC should be in a position to cater to the material requirements of the senior officer, e.g. running his mess in the field, or to see to it that the senior officer who might otherwise feel shy, was properly looked after, so that he could better perform his own task of commanding troops in the field. General Officers visiting troops are, at times, overwhelmed by their hospitality. One of them had worked out quite an "act" with his ADC to overcome this problem. After a few drinks, the ADC would walk up to the General and caution him publicly that he had had enough. After that, if the hosts were still plying him with more, the ADC would walk up to the General, take his glass from him, look at his watch and drag the general away. As he called his General "Master", and the General called him "Slave", the act looked all the more impressive, especially when it was seen for the first time. Needless to say that a little shownmanship may be used with effect to build up the personality of a commander and it did provide a laugh in many an officers mess, when things were far from cheerful during the war in Burma. In a nut-shell, it may be said that the relationship of an ADC may be approximated to that of a son to his father, and it is no wonder that there are many examples of distinguished officers in the past who employed their own sons as their AsDC for this very purpose.

Many officers will look askance at this statement, and it is very much doubted whether there will even be a handful of officers who would be prepared to serve as AsDC to their own fathers under modern conditions. Possibly, this is the clue to the great shortage of officers for volunteering for this appointment, and for the general complaint being heard about the dearth of suitable material for this appointment.

There are also cases when AsDC have been used as Liaison Officers and the case of the band of brilliant young officers who served Field Marshall Montgomery in this capacity in his campaigns during World War II easily comes to mind. These officers were sent out to bring back to the Field Marshall "the smell of battle" as only young junior officers can do, knowing the actual participants in battle personally and at their own level. By this method the senior commanders could get the feel of the battle, and come to know the intimate atmosphere of units under his command. There are obvious dangers in the employment of AsDC in this manner, but definite advantage too, and Montgomery picked his men carefully, and insisted that they should have had good war records. The very fact that a number of them were killed in action while in the pursuit of the tasks allotted to them shows that the job was no sine cure.

AsDC have also been used as "stand-in" for staff officers at formation headquarters. Very often, there is not more than a few hours work for an officer as an ADC when conditions are static, and he can be most helpful to relieve the more hard-pressed members of the staff. But the basic fact has to be remembered, that an ADC is a staff officer in his own rights. This is often not realised by many officers—he is not a glorified chaprasi, but an officer who should be able to, and should be made to take down notes, keep a diary, speak on the wireless and perform most of the duties which are often apportioned to staff officers whom one often finds travelling with General Officers. In most cases General Officers can do away with this extra officer on their entourage and their ADC can perform these duties. It should only be in exceptional cases that a staff officer in addition to the ADC would be required, e.g., if particularly complicated cases had to be discussed at out-stations.

HOUSEHOLD DUTIES

The principal trouble at present appears to be that most AsDC do not have to function "in the camp". In far too many cases they are being employed in areas which have none of the basis of camp life and in point of fact there is very little for them today to assist their seniors while not in the field. From this stems the vast majority of ills which are associated both by the officers so employed and by officers employing them. When junior officers find themselves as AsDC to General Officers in command of troops, but having their Headquarters in big towns like Delhi, Poona, Calcutta or Bombay, doubts begin to arise in their minds as to their utility. However, not only will their services be required on tours, but even at Headquarters, they have their duties. One of these is to assist in the social activities at the General Officers' household. It is, however, difficult to draw a line where this begins and ends. The running of the house is the privilege of the Lady of the house. But this is not to say that an ADC has no part in the functioning of the senior officer's household at all. If we remember the analogy correctly, he is like a son of the officer he is serving, and a son does have some part to play in the running of the house, but this should not impinge upon the domain reserved for the Lady of the house. As long as this distinction is understood clearly by the three parties concerned—the senior officer, his lady and the ADC—there should be no problem on this score.

It is a well known fact that in many cases young officers are hesitant to serve as AsDC on the staff of General Officers because they are apprehensive of the treatment they are likely to be meted out in their household. In this context, it might be well worth recalling the well known story of some thirty years ago. It is said that an ADC of a well known Governor, and later Viceroy, went up to him with the request that he be relieved of his appointment long before the end of his tenure. With a look of concern, His Excellency asked "Am I working you too hard? Or, is it that the food of this household does not suit you?" The ADC replied that he was well satisfied as to all these, but still insisted on returning to his regiment. He is then reported to have asked "Tell me, now that we are just by ourselves, is it Lady....? When the ADC replied in the affirmative, He's reply was the classic "Think of it, you have to put up with her for only three years, for me it is for life!"

ADC TENURE AS AN EDUCATION

There is much that a young officer can learn during his tenure as an ADC. To begin with, he will have a much wider perspective than he could ever had had he stuck purely to his regimental duties. He will be in a position to learn by example and precept from his superiors living at a proximity to them which he could never hope for were he not so employed, and provided he is properly employed, there is no reason why he should get out of touch with his profession. There is no excuse why an ADC cannot be spared to complete his annual classification, or any basic military training expected of for an officer of his rank and service, or for an

ADC to become soft and physically unfit. Almost all our senior officers have been through the mill themselves, and realise the value of these basic military requirements. It only so happens that an ADC is in a position to escape some of the routine chores, and by the mere proximity to senior officers assume a halo of importance. Quite often he tends to exaggerate his own importance and take full advantage of any tendency on the part of other officers of their Headquarters who may tend to let them off, just in case the ADC might "mis-inform the General".

Finally, most General Officers who are authorised AsDC do proceed on tours and inspections and attend exercises in the field with troops. In peace time these exercises are the nearest we can hope to approximate war conditions, and it is during these that their AsDC will be able to assess their fitness or otherwise for the jobs they have been grooming themselves for.

All in all, officers appointed AsDC to General Officers should regard themselves as specially chosen, in whom great trust is reposed and who are given an unrivalled opportunity to gain valuable professional knowledge and experience.

AsDC TO THE PRESIDENT AND GOVERNORS

While on the subject of AsDC it would not be out of place to touch upon the position of a handful of officers who are appointed to these special appointments. It is extremely dangerous to generalise on the subject, because the conditions of work and living differ vastly from place to place, and person to person. The basic fact, however, remains that these officers serve to enhance the prestige and position of the high offices of their principals, and have been chosen as representatives of the Services, whose honour they should zealously guard. The general precepts applicable for other AsDC apply to them also, but also a host of others. They come into contact with politicians, senior civil servants, diplomats, and a vast number of common people. They must, therefore, ever be on guard-that they do not besmirch their reputations—personal as well as professional. They have to contend with some important facts which are, generally speaking, little realised outside. There is the vast age difference the AsDC will find between themselves and principals. In addition, they might also find themselves working under circumstances entirely different from those they might be used to under service conditions. It is then that the AsDC's resilience to adapting themselves to new circumstances will be exercised to the full. These AsDC might well find themselves in the danger of being overwhelmed by these new and strange surroundings, but they have no right to forget their basic mission which is to serve in the capacity of representatives of their Service in the household of important dignitaries in the special role allotted to them. While it is a fact that when serving in this role, they might enjoy many exclusive privileges, but these will be appreciated best when considered as counter-balances to the restrictions which surround them. Only thus will they be able to view the situation in which they find themselves in its correct perspective.

THE JOB IN RELATION TO THE CAREER

Having examined the functioning of AsDC under various circumstances, we find that there is little which has changed from the past to cause the job to be looked down upon. The good ADC still does a worth-while job, and enhances his professional knowledge, and improves his general education. On reverting to regimental life, he should find little difficulty to re-adjust himself back into the usual groove. He would have been the better equipped for it after his tenure of ADC, with his vision much widened, and he would have gained in his knowledge of men and things. On the other hand, the general officer, or the senior officers on the staff of high civilian dignitaries are also responsible to see to the training

of the ADC during his tenure of duty, and to see to it that he has not been "spoilt" by over-indulgence, or has been forced into positions where he would have to work without regard to his position and status of a commissioned officer. It is, therefore, unwarranted pessimism on the part of commanding officers to consider that a tenure as an ADC would detract something from the career of a bright young officer. For the officer himself, once he realises that he has certain rights as well as duties in thisappointment, he should have no hesitation in accepting the appointment of an ADC if he is offered it, and consider it the honour it is.

There is, however, one point which we may stress at this juncture. Too often the picture of an ADC is that of a young debonaire youth and a good mixer. Whereas all these are assets of a great order, we must also consider the appointment as AsDC of the somewhat older officers who are no longer as physically fit as they were, who have suffered war wound, or injuries and are, therefore, not able to serve under the more arduous conditions of unit life. There will be available some situations for their employment, especially as a recognition of the services they have rendered.

CONCLUSION

The job of an ADC continues to be one of importance, and is an education of a unique nature which can do little but good to a young officer. There is, however, a heavy responsibility for this young officer's well being on the shoulders of his principal. As long as this is understood, and acted upon, there is no reason why we should not continue to get good officers for this appointment.

THE INTERNATIONAL SCENE

By MAHENDRA KUMAR

THE most important event of international significance during the quarter under review was the death of Mr. Dag Hammarskjoeld which precipitated a new crisis in East-West relations. The world tension became more serious on account of the firm conflicting attitudes of the West and the Soviet Union on problems like Berlin, Germany and test ban. During the quarter a significant step towards the establishment of peace was taken by non-aligned countries of the world who conferred for about a week in Belgrade. Prime Minister Nehru made special efforts for easing the international tension and had a three-day meeting with Mr. Khrushchev. The three-year-old United Arab Republic came to an end with an army revolt in Syria and the subsequent declaration of Syria as an independent sovereign state. In Turkey, members of the Menderes Government which was overthrown in May last year were tried and convicted for the violation of the constitution and awarded various punishments including death sentence; Mr. Menderes and two of his former Cabinet colleagues were hanged. West Germany went to the polls and Chancellor Adenauer's Party regained majority.

SYRIA

On 28 September there was an army revolt in Damascas (Syria). It was believed to have been aimed at ending "Egyptian domination" over Syria, a partner in the United Arab Republic. It may be recalled that in 1958 Syria and Egypt formed a new State, the United Arab Republic. Thus the Syrian revolt came only three years after the establishment of Egyptian-Syrian union. Although the revolt was of seven hours' duration, yet its repercussions were extremely serious. Damascas Radio claimed that the rebellion was against the "tyranny and corruption of President Nasser's regime". The rebels ringed the army quarters and captured the Syrian Capital and broadcast a series of communiques declaring that the Syrians will endeavour to live a life of honour, dignity and freedom. Street demonstrations in Damascas against President Nasser also took place with slogans like "Syria is for the Syrians" and "Long may Syria live as an independent Republic". Some demonstrators also attacked government buildings and broke the UAR emblem at certain places. The rebels claimed that their action sought to correct the illegal status of Syria. Before the revolt ended, President Nasser made a proclamation that the union of Syria would not be dissolved.

But the next twenty-four hours disproved his declaration; and on 29 September the Syrian insurgents announced the severance of Syria's link with Egypt and proceeded to form a civilian government to end President Nasser's "tyranny". It was also announced that an eleven-man cabinet, headed by Mr. Mamoum Kuzbari, Speaker of Syria's National Assembly in 1953, would hold charge till a new legislature is elected. A communique, viz., Communique No. 19, issued by the Syrian Revolutionary High Command, announced that free election in Syria would be held "as soon as the situation permits". The same day Jordan and Turkey accorded recognition to the new Syrian Provisional Government.

When the revolt broke out in Syria President Nasser ordered military operations against Syria but on 30 September he disclosed that he had called off military operations "because Arab blood must not be shed by Arabs". However, he expressed his firm determination to maintain the Egyptian-Syrian unity despite "everything". On 30 September the new Syrian Government requested for Syria's readmission to the United Nations.

Having secured recognition from Jordan and Turkey, the new Syrian Government of Dr. Kuzbari proceeded to entrench itself with a declaration of policy promising socialist democracy as well as free elections in four months. Reports were available to establish that Syria's 32,000-man army was in complete control of the country within three days of the outbreak of the revolt. On 1 October, Dr. Kuzbari proclaimed a Syrian Arab Republic and announced to restore Syria's old national flag and reinstate the national anthem. One chief item of anti-Nasser programme was the hauling down of President Nasser's portrait from government offices and shops. The same day President Nasser severed relations with Jordan and Turkey for recognizing new regime in Syria.

The real reasons which led to this revolt cannot possibly be ascertained at present. However, dependable observers feel that the fact that it came only a few days after Col. Abdel Hamid Serraj lost his post as President of Syria's Executive Council in the Cairo Cabinet cannot be bypassed as insignificant. Col. Serraj is Syria's "strong man". In a reshuffle of the Cairo Cabinet in August, Serraj was appointed Vice President incharge of internal affairs. He was reported to have found that this post carried no power and that after a clash with the War Minister, Marshal Amer, resigned two days before the insurrection. If this story is true and if it can provide any clue to the casuse of the Syrian army revolt, then it can perhaps be assumed that in the beginning the rebels had the limited objective of compelling President Nasser to restore to the Syrian part of the UAR the same degree of administrative autonomy which it enjoyed earlier. This assumption is also corroborated by the fact that the rebellious Syrian officers presented a list of their demands to Marshal Amer who chose summarily to reject the demands thinking, perhaps, that any compromise would mean a defeat for President Nasser. The rebels, therefore, preferred secession to unconditional surrender. Now they are in a strong military position with the control of not only Damascas but slos of Aleppo—a city of vital strategic importance. In these circumstances it is difficult to understand how President Nasser would overcome the challenge hurled at him by Syria. Nor is it easy to prognosticate whether or not the results would be permanently consolidated.

DAG HAMMARSKJOELD

Dr. Dag Hammarskjoeld, United Nations Secretary-General, died on 17 September in a plane which crashed in burning fragments in a bush about eight miles away from Ndola (Northern Rhodesia). He was on his way to vital peace talks with President Tshombe of Katanga. The plane in which Mr. Hammarskjoeld was travelling from Leopoldville was to land at the Ndola airport. The total number of deaths in this air crash was thirteen. It was reported that the aircraft was shot down by a "marauding" Katangese aircraft. A survivor reported that there were several explosions aboard the plane before it crashed.

The tragic death of Mr. Hammarskjoeld shocked one and all beyond measure. It was received with deep sorrow in political circles. Prime Minister Nehru expressed "deep grief" at the death of Mr. Hammarskjoeld, "a great international civil servant" who had occupied for many years his high office with distinction and ability". The President of the U.N. Security Council, Mr. Nathan Barnes of Liberia, paid a tribute to the late Mr. Hammarskjoeld by saying that in his death the "whole world has suffered a great loss".

Mr. Hammarskjoeld was buried in a simple family grave in Uppsala (Sweden) on 29 September. People from all walks of life and from all countries had come to pay their last respects to the late Dag Hammarskjoeld. Among them

were the Swedish Royal family, Lord Kilmuir, British Lord Chancellor, members of the diplomatic corps and representatives of almost every member country of the United Nations.

Mr. Dag Hjalmar Agne Carl Hammarskjoeld came on the international scene in April 1953 when he took up the "most impossible job in the world"—that of the United Nations Secretary-General. Born on 29 July 1905, he was a son of a Swedish Prime Minister. He entered the Swedish Department of Finance as a civil servant. In 1949 he became head of the Swedish Foreign Office and in 1951 he became Minister of State or Deputy Foreign Minister for International Economic Affairs.

BERLIN

The Berlin problem touched new dimensions during the quarter under review. It was reported on 25 July that the United States would offer a four-point plan over Berlin. According to it, the United States were to come out with the proposal of a new status for Berlin which must continue to guarantee the freedom to its people. The negotiable points in this plan included the whole central European situation and the size and disposition of the armed forces in Europe. The second point related to the introduction of the Berlin question in the United Nations at an appropriate date. This was perhaps motivated by the consideration that when the issue would go to the U.N. General Assembly after the exercise of veto by the Soviet Union in the Security Council, then the uncommitted nations in the Assembly, who pronounce the principle of self-determination would support the guaranteeing of the freedom of West Berliners. The third point was the strengthening of conventional forces of the United States. The fourth measure concerned with an economic blockade of Russia and Eastern Europe.

Meanwhile, reports were current that both the United States as well as the Soviet Union started strengthening their conventional forces. In his speech delivered on 26 July, President Kennedy made a firmest possible declaration of the U.S. unwillingness to yield on its rights in West Berlin. He also extended an invitation to the Soviet Union to negotiate honourably on the entire range of problems so as to set at rest legitimate Soviet fears. President Kennedy referred to the "Soviet Union's historical concern about their security in Central and Western Europe." This raised a problem about the Oder-Neisse Line which marks the frontier between Poland and Germany. A united Germany may demand the redefining of the boundary because the present boundary along the Oder-Neisse Line was only tentatively fixed at Potsdam in 1945. For many years now the Soviet Union, Poland and Czechoslovakia have been waiting the Oder—Neisse Line to be made final. References to the Soviet Union's historical fears made in Kennedy's speech have been interpreted to be indicative of his willingness to meet the Soviet desire on this score and to provide a basis for negotiations. But by giving this concession the West would like to retain Soviet responsibility in guaranteeing the rights of access to West Berlin. Another Soviet fear which Mr. Kennedy's speech is interpreted to give a promise to dispel related to the West arming West Germany with nuclear weapons. His words that he was "willing to talk and listen with reason" hinted at his desire for that. In his speech President Kennedy made an offer to test the Western rights to West Berlin by "adjudication." But this was rejected by the Soviet Union which does not deny the legality of Western rights but asserts that they have run their course.

On 4 August the British Prime Minister, Mr. Harold Macmillan, told in a television broadcast in London that the Western Allies would stand firm on their rights in West Berlin.

Meanwhile, the Soviet Union sent notes on the Berlin question to the four Western Powers. Although they were comparatively moderate in tone than previous Russian utterances, yet they presented no appreciable change in fundamental Soviet attitude. The Soviet Union reassured that their proposal for a free city of West Berlin signified nothing but a desire to settle the status of Berlin after the signing of a peace treaty. She also ruled out the possibility of German reunification through free elections by maintaining that Germany is divided by deep differences of social systems, that there are already two independent German States in existence and that these States have made their choice between the different systems. It was on the eve of these Soviet notes that the Western Foreign Ministers Conference began in Paris on 5 August to discuss at length the various possibilities of negotiation with the Soviet Union on the Berlin problem. During the course of the Conference there were differences between the Russians and the British on the one hand and the French and the West Germans on the other. While the former group wanted to include in the final communique the West's will'ngness to negotiate with Russia on the Berlin problem, the latter group held out the plea that it would be tactically unwise for the West to take the initiative at this stage. Earlier, on 3 August, Mr. Khrushchev expressed to the Italian Premier, Mr. Fanfani, his intention to sign a peace treaty with East Germany if no agreement was reached with the West. In a communique issue after a three-day (3 to 5 August) meeting of the Warsaw Pact Powers, unanimous readiness was expressed to contribute by every means to the conclusion of a German peace treaty. It was also reported on 6 August that the Soviet Embassy in Bonn was openly hinting that the Russian Draft Peace Treaty for East Germany provides almost all the reasonable safeguards which the West would like to seek in order to maintain its rights in Berlin. Observers on international affairs believe that Mr. Khrushchev may sign the peace treaty with East Germany much earlier than expected.

On 13 August the East German authorities closed the border between East and West Berlin.

Diplomatic sources believe that Mr. Khrushchev is now eager for early talks with the West on Berlin. But the Western Powers do not seem to be ready for it.

India's attitude to the whole Berlin problem regards the questions of the Order-Neisse Line, of western rights of access to West Berlin, and of two Germanies as parts of one problem. Prime Minister Nehru said in the Lokasabha in August and repeated in his press conference in Delhi on 17 September that the Oder—Neisse Line could not be changed by anything short of another war. Therefore, he suggested, such changes should not be discussed.

CONGO

On 12 July Mr. Tshombe went back on his promise and told a Press Conference that Katanga would not send any deputies to the forthcoming reconvened session of the Congolese Parliament and insisted that there should be a summit meeting of Congolese leaders before Parliament is reconvened. Thus Mr. Tshombe repudiated the agreement which he signed with the Central Congolese Government before his release and in which he had made an offer of military co-operation with the Central Government and had also acquiesced in a United Congo.

At last the Lower House of the Congolese Parliament opened on 23 July. Meanwhile, President Kasavubu made an appeal to the parliamentarians in Katanga and the Orientale Province to attend Parliament. He was also reported to have given an undertaking that he would accept any Government approved by Parliament. On 25 July the Central Parliament meeting at Louviam University outside Leopoldville

elected Mr. Joseph Kasongo, pro-Lumumba, President of the Chamber of Deputies and Mr. Komoriko President of the Senate. Other offices also were given mostly to pro-Lumumba men. Followers of Mr. Tshombe and Mr. Gizenga were not present at this meeting. On 27 July Gen. Mobutu declared that he would not be bound by the orders of any government approved by the reconvened Parliament.

After the resignation of Mr. Ileo's Government, Mr. Cyrille Adoula formed the new national government with himself as Prime Minister on 1 August and Mr. Gizenga as Vice-Premier. Mr. Adoula was nominated as Prime Minister by President Kasavubu. Mr. Adoula in his inaugural address to Parliament on 2 August sharply criticised President Tshombe of Katanga for the latter's secessionist policy. He also said that his Government would soon end Katanga's secession. On the following day the new Government published its programme to restore law and order throughout the Congo. It also pledged to pursue a policy of strict non-alignment with the East or the West. On 6 August Mr. Adoula warned Mr. Tshombe that unless he "surrendered" unconditionally, the Congolese Army would crush Katanga by force. On 8 August the Congolese Army under Joseph Mobutu pledged its support to the new government of Mr. Adoula. On 18 August Antoine Gizenga publicly recognized in Stanleyville the Government of Premier Cyrille Adoula as the only legal Congolese Government. He, however, gave no indication when he might go to Leopoldville to join his post as Vice-Premier in the Adoula Government. This public declaration by Mr. Gizenga was secured by Mr. Adoula's trip to Stanleyville. But even this did not improve the situation in the Congo satisfactorily. The reason is that Mr. Tshombe of Katanga and his follower-deputies did not attend Parliament. Only seven Katangese deputies came to Leopoldville to attend Parliament under the United Nations protection. Mr Tshombe still kept out.

Towards the end of August the U.N. Command began disarming Mr. Tshombe's forces bit by bit. A major achievement scored by the U.N. Forces in this connection was the disarming of European personnel in command of the Katanga forces. But the same achievement proved dangerous in other fields. Mr. Tshombe's approval for the expulsion of the Belgian, British, and French officres from the gendarmerie and from the territory was forced, not willing. This led to Mr. Tshombe's renewed assertion of Katanga's independence. The situation assumed new turn on 6 September when several United Nations soldiers were injured by stones in Elizabethville during new outbreaks of violence. The same day the Katanga National Assembly voted unanimously by a show of hands not to modify the first article in the Constitution specifying that Katanga is an independent and sovereign State. This came as a result of Mr. Tshombe's decision to hold a referendum on the question of Katanga's independence from the rest of the Congo. By the end of the first week of September the U.N. forces were in conrtol of the strategic centres of Katanga. Mr. Tshombe continued to threaten resistance to any further implementation of the Security Council resolution on the Congo. During the second week of September there was a bitter fighting between the Katangan Army and United Nations forces in Elizabethville. As a result the United Nations, backed by the Congolese Central Government, got in virtual control of the Katanga province. Ministers of the former Katanga Government were reported to have either fled or gone into hiding. President Tshombe was reported to have been kept under the United Nations protection in Elizabethville. The United Nations troops made efforts to search out other Ministers and arrest them. On 13 September a Commissioner of the Congolese Central Government, Mr. Egide Bochely-Davidson, flew from Leopoldville to take charge of the Katanga Province. Mr. Adoula also announced the appointment of Col. Moke, a Katangan soldier, to take charge of the Katangan Army to be later integrated in the National Congolese Army under Gen. Mobutu. Later, Mr. Tshombe was reported to have fled his

capital and Mr. Godefroid Munango, Katanga's former Interior Minister, was reported to have fled across the border to Northern Rhodesia. Thereupon, the U.N. Chief Representative in the Congo announced that the secession of Katanga had ended. To the extent that the events of September showed happy signs of the unity of the Congo, the turn of events should be regarded as satisfactory.

Meanwhile, efforts for a cease-fire continued. President Tshombe flew to Ndola (Northern Rhodesia) for talks with the United Nations. Earlier, on 17 September, the U.N. Secretary-General, Dag Hammarskjoeld, died in the crash of the plane in which he was travelling from Leopoldville to Ndola. After his death, the United Nations was represented at the Ndola talks by Mr. Khiari, a Tunisian senior administrator in Leopoldville. On 29 September, Katanga and the United Nations signed a provisional cease-fire agreement to come into effect immediately. The agreement provided for an exchange of prisoners and a complete standstill on movements of troops, arms and munitions. The agreement created a four-man commission with full powers to implement the agreement.

Whatever be the events leading to this cease-fire agreement, the agreement itself is a relief. But optimism is to be guarded. There have been so many disappointments and setbacks in the past that one would hesitate to count upon this agreement. But the fact that fighting in Katanga has been brought to a halt is itself an important achievement. It is earnestly hoped that this agreement would not only prevent the fighting but would also provide a basis for a permanent resolution of the Congo tangle leading ultimately to the formation of a united Congo.

NEUTRAL NATIONS CONFERENCE

From 1 to 6 September was held the Neutral Nations Conference in Belgrade, the capital of Yugoslavia. It will be recalled that in June this year a preparatory meeting of non-aligned nations was held in Cairo to work out the details of the Neutral Nations Summit. In all, twenty-five countries participated in the Belgrade Conference. It was inaugurated by Marshal Tito, President of Yugoslavia. The Conference met on the eve of the most critical stage in the East-West relations which have been deteriorating on account of the problems of Berlin and Germany. On its opening day the Conference was addressed, among others, by its three cosponsors—President Nasser, President Tito and President Sukarno. President Tito demanded that the big powers should pay heed to the voice of non-aligned nations. President Nasser called for a meeting of the leaders of the big powers at "the earliest possible time". President Sukarno reviewed the general world situation and expressed concern with the intensification of the cold war and a desire to see the world problems solved within the framework of the United Nations.

On the second day of the Conference, that is, 2 Septemebr, the most important speaker was the Indian Prime Minister, Mr. Jawaharlal Nehru. In an emotional speech he called on the great powers to pocket their pride and reopen negotiations for complete and general disarmament at once. It may be mentioned here in passing that just on the eve of the Belgrade Conference the Soviet Union had declared that she would resume the nuclear tests and consquently there was a Soviet explosion of a nuclear device on 1 September. In his speech on the following day Mr. Nehru deeply regretted it. He unequivocally called the attention of all participants at the Belgrade meet to the imminent danger of atomic annihilation. He also denounced the Portuguese atrocities in Angola and the action of France in Bizerta and Algeria. He tried to impress upon the minds of his fellow delegates that the problem of colonialism, though important, was not more important than the general problem of war and peace. Most of the African leaders, however, wanted the problem of colonialism to be given primary importance.

Another point on which there was a good deal of difference was the solution of the Berlin and German problems. Mr. Nehru lifted the conference from the mere discussion of regional issues to an international level but several delegations, especially the African ones, did not show much evidence of a proper realization of the deterioration in international situation. On Berlin, everybody wanted a peaceful solution but proposals for it varied from the moderate to the extreme. Mr. Nehru advocated the acceptance of two Germanys as a fact but did not support the signing of a peace treaty or the exchange of diplomats for the time being. This line of Mr. Nehru was supported by the Burmese Premier. On the contrary, Ghana and Indonesia endorsed the idea of an immediate signing of a peace treaty with East Germany. Further, while the moderates desiring a reduction in world tension demanded full guarantee of access rights to West Berlin, Indonesia supported the East German view that access should be subject to the check by "Sovereign" East German Government. Marshal Tito expressed the view that East Germany whose system was completely different from the "capitalist" system of West Germany should be allowed to follow its "socialist" course. President Nasser and the Arab delegations were generally against the partition of Germany. Several countries' heads also expressed the view in the Belgrade Conference that non-aligned countries should be fully associated with any discussion on disarmament. But Indai's point of view was that the big nuclear powers should first come to grips with the problem before the neutrals participate in any control system and a disarmament programme. At this stage, India held that any Conference on disarmament if attended by all countries, would become much too unwieldy.

Because of these differences there was a difficulty in drafting the final communique of the Conference. Ultimately a final statement was issued in which the great powers were urged to start immediate negotiations on the world tension. The Conference decided to address a joint letter to Premier Khrushchev and President Kennedy requesting them to solve the Berlin and German problems amicably. Two sets of emissaries, one consisting of Mr. Nehru and Mr. Nkrumah and the other of President Sukarno and Mr. Keita, delivered respectively the letters to Mr. Khrushchev and Mr. Kennedy.

SIXTEENTH U.N. GENERAL ASSEMBLY

The sixteenth session of the United Nations General Assembly opened on 19 September in an atmosphere of crisis created by the world tension and further complicated by the death of Mr. Dag Hammarskjoeld. The first meeting, presided over by the interim President, F. H. Boland of Ireland, lasted only three minutes and adjourned after hearing a tribute to the late Mr. Hammarskjoeld from Mr. Boland. The adjourned Assembly met on 20 September and unanimosuly elected Mr. Mengi Slim of Tunisia President of its sixteenth session. Mr. Slim's unanimous election was made possible by the withdrawal of Dr. Ali Sastroamidjojo of Indonesia from his candidature. Mr. Slim is the first African to preside over the United Nations. His election has been considered a great honour to the whole African continent.

The most important feature of the U.N. Assembly's session on 21 September was a clash between India and Portugal and between India and South Africa on the question of the inclusion of two particular items in the agenda of the Assembly. One was the problem of the persons of Indian origin in South Africa and the other was forcing Portugal to submit information to the United Nations on conditions in Portuguese colonies of Goa—Diu, Daman, Angola and Mozambique. Both the questions were, however, inscribed on the agenda of the Assembly. The same day the Steering Committee of the General Assembly recommended some other important items to be discussed by the Assembly: the question of a seat for Communist China

in the United Nations, the question of alleged communist repression in Hungary, the Algerian problem, Austria's complaint against Italy concerning the treatment of German-speaking population of Bolzano, and the question of ending nuclear weapons tests.

After a two-day recess the Assembly met on 25 September. The main speaker on this day was President Kennedy of the United States. He called on the leaders of the Soviet Union "to advance with us step by step, stage by stage, until general and complete disarmament, has been achieved. We invite them now to go beyond agreement in principle to reach agreement on actual plans." President Kennedy put forward the U.S. disarmament proposals which included, firstly, the signing of a test ban treaty by all nations without waiting for general disarmament; secondly, the production of fissionable materials for use in weapons should be stopped and their transfer to any nation now lacking nuclear weapons should be prevented; thirdly, the transfer of control of nuclear weapons to States that do not now own them should be prohibited; fourthly, nuclear weapons should be prevented from seeking new battlegrounds in outer space; fifthly, the existing nuclear weapons should be destroyed and their materials should be converted into peaceful uses; and lastly, the unlimited testing and production of strategic nuclear delivery vehicles should be halted and gradually destroyed.

During the course of his address to the world body, Mr. Kennedy also dilated upon the problems which threatened world peace—the problems of Berlin, Laos, and Vietnam. He expressed the U.S. faith in the peaceful solution of all world problems within the framework of the United Nations. He also plunged into the question of a successor to the late Mr. Hammarskjoeld. He ruled out the Soviet "troika" proposal in any form.

On 25 September the Assembly approved a 91-item agenda which brought the controversial question of Chinese representation up for full-scale discussion for the first time. The following day the Assembly admitted, on the recommendation of the Security Council, Sierra Leone as the hundred member of the United Nations. The recommendation of the Security Council was unanimous, although it could be possible only after a two-hour procedural wrangle. Membership applications of Mauritania and Outer Mongolia were also considered in the Security Council but the trend of the discussion showed that Mauritania and Outer Mongolia stood no chance of admission to the world body.

On 27 September the Soviet Government submitted to the General Assembly a 2500-word memorandum strongly criticizing the Anglo-American initiative to have the Assembly debate on nuclear tests ban treaty. It rejected President Kennedy's proposal of a nuclear test ban and reiterated the Soviet demand that the "sole and practical solution" was to include the issue under "a general and complete disarmament."

This year's session of the U.N. General Assembly is crucial in several ways. Perhaps it is for the first time that the agenda of the Assembly includes such delicate items as the question of Chinese representation in the world organization. Further, the Assembly is meeting in a strange set of circumstances created by the death of Mr. Hammarskjoeld. In the past also the United Nations has been faced with highly critical problems. But this time the nature of crisis is different. If in the past it concerned with the success or failure of the United Nations it is now concerned with the basic question of the existence of the world body itself. The crisis which the growing East West tension has precipitated and Hammarskjoeld's death has enhanced is to be met in a spirit of reconciliation and harmony. The imminent crisis may be averted, if not completely resolved, if a successor of the late

Mr. Hammarskjoeld acceptable to both is found. The significance of this year's Assembly would be measured in terms of its success or failure to perform this task.

BIZERTA

The quarter under review witnessed a new phase in the French-Tunisian relations. On 17 July President Habib Bourguiba of Tunisia announced in Tunis, capital of Tunisia, that Tunisia would soon isolate the French naval base at Bizerta, the Tunisian port, with road blockade. This announcement was made as a move of Tunisia's demand for the withdrawal of French forces from the base. In consequence, there began a "small war" between French and Tunisians in Bizerta. This led to the severance of Tunisia's diplomatic relations with France on 20 July, after about one hundred and twenty Tunisians had been killed or wounded after attacks by French planes. As fighting continued around Bizerta, France offered to discuss a cease-fire with Tunisia. On 21 July Tunisia called on the Security Council to bring about total evacuation of French forces from the base at Bizerta. The same day French ships broke Bizerta blockade and attacked Bizerta after an air bombardment.

On 22 July the U.N. Security Council called for an immediate cease-fire and a return of all forces to the positions they occupied before the fighting began. Some normalcy in the situation was restored when on 12 August "some elements" of the Second Foreign Legion Paratroop Regiment left Bizerta. Meanwhile charges and counter-charges of the violation of cease-fire continued. On 21 August 32 nations including the Federation of Malaya and Yugoslavia sponsored a draft resolution in a special session of the U.N. General Assembly. The resolution called for immediate Franco-Tunisian negotiations on the Bizerta naval base and for recognition of sovereign rights of Tunisia. The same day Tunisia appealed to the United States and to France's other colleagues in the North Atlantic Treaty Organization to support the United Nations to remove French forces from Tunisia. The Afro-Asian resolution in the General Assembly was opposed by the United Kingdom with the plea that its criticism of France was 'not likely to contribute to a solution'. But on 26 August 66 out of 99 member states in the General Assembly voted the resolution critical of France. On 30 August, the Casablanca Powers of Africa said in a communique that France's insistence to remain in Bizerta proved the danger of military bases. The communique expressed satisfaction at the United Nations resolution calling France to evacuate Bizerta.

NEHRU-KHRUSHCHEV TALKS

After attending the Neutral Nations Conference in the first week of September Mr. Jawaharlal Nehru visited the Soviet Union from 6 to 9 September. He reached Moscow on 6 September and received a tremendous welcome there. Later, the same day Mr. Khrushchev received Mr. Nehru and Mr. Nkrumah who handed over to him the letter from non-aligned leaders. On the night of 6 September Mr. Khrushchev held a banquet at the Kremlin in honour of Mr. Nehru. Speaking on this occasion, the Soviet Prime Minister said that the question of German peace treaty had become a key problem of the day and that the signing of the treaty would normalize the situation created in West Berlin. Replying to the Soviet Premier's toast Mr. Nehru said that it would be the limit of stupidity for any one to start a war. The dinner in the Kremlin took place in a warm and friendly atmosphere.

The first round of important talks between Mr. Nehru and Mr. Khrushchev came off on 7 September. Both the leaders emphasized the Indo-Soviet friendship during their conversation. But the main subject of discussion was the world situation. The two leaders discussed "everything" including Germany, Berlin, and nuclear tests. The talks continued on 8 and 9 September in a "cordial, sincere, and

businesslike atmosphere". The Nehru-Khrushchev parleys tried to discover a common approach to solve the deadlocked issues during the world towards war. The two main issues which dominated the talks were the problesm of Germany and disarmament. At the conclusion of their talks Mr. Nehru and Mr. Khrushchev made public statements of their positions in speeches to the Indo-Soviet Friendship Association. Mr. Nehru pleaded for peace through peaceful means of negotiation and expressed great "concern" about nuclear tests. Mr. Khruschev insisted on German peace treaty and gave reassurances on access to West Berlin. He also commended the Belgrade Conference call for summit talks but said nothing on its appeal for the cessation of nuclear tests.

Mr. Nehru's visit to the Soviet Union was described as "a visit of peace and friendship" and his talks with Mr. Khrushchev as an "indication of his sincere efforts for world peace". The Nehru-Khrushchev meeting was a manifestation of an identical approach of India and Russia to the settlement of a number of important international questions and it is bound to have a favourable effect on the fate of the world. It restrengthened the faith that states, inspite of differences in their social and economic systems, are able to stand together as purveyors of peace.

WEST GERMAN ELECTIONS

West Germans went to the polls on 17 September to elect a new Bundestag (Lower House of Parliament) for four years. All Germans over 21 were entitled to vote. In all, 2,263 candidates contested the election under a system which gives each voter two votes and leaves the final number of seats in the Bundestag uncertain until all the results are out. The total number of registered electors was 37,100,000. The ruling Christian Democratic Party of Chancellor Konrad Adenauer secured 241, the Social Democratic Party 190, and the Free Democrats 66 seats. No other party was able to secure any representation. Voting in the remaining one constituency could not be held on 17 September because of the death of one of the candidates. The Christian Democratic Party retained its position as West Germany's most powerful party but this time it got 38 seats less than in the last general election. The parties, other than those of the Social Democrats, Christian Democrats and Free Democrats, which gained seven seats last time got nil this time. All the 6 seats lost by the Christian Democratic Party and other parties-45-were captured by the Social Democrats. The percentage of the votes polled by various parties was: Christian Democrats—45.3; Social Democrats—36.3; Free Democrats -12.7; All German Party-2.8; German Peace Union-1.9; German Community-0.1; German Reich Party-0.8; and South Schleswig Voters' Union-0.1.

Among the Christian Democrats returned to the **Bundestag** were Chancellor Adenauer, Vice-Chancellor Dr. Ludwig Erhard, Dr. Heinrich Von Brentano, Foreign Minister, and Dr. Franz-Joseph Strauss, Defence Minister.

In the last West German elections the Christian Democratic Party had an absolute majority which it has lost in this time's election. There has been a continuous increase in the pressure of public opinion that Dr. Adenauer should now retire from politics. Prior to election people had even started talking that Herr Erhard would replace Dr. Adenauer. But on the other hand, the West Germans favour a firm stand against the Soviet Union. Dr. Adenauer and his party seemed better qualified to stand up to the Communist pressure. That the Christian Democrats have even then suffered a heavy loss in electoral support is of course a surprise. However, it makes a coalition necessary if the Christian Democrats want to enjoy majority support in the Bundestag. But Dr. Adenauer is totally opposed to his party's joining a coalition with any party save the Free Democratic Party. He has ruled out an all party coalition as "not in keeping with the democratic feelings of

our era". For him the "real and most important thing is that the foreign policy instituted by the Christian Democratic Party should be continued with uninterrupted vigour in the same direction". Now the position is somewhat crucial. Dr. Adenauer is ready to join a coalition only with Free Democrats and Free Democrats said before the elections that they would join a coalition only under the leadership of another person like Herr Erhard. Oddly enough, Dr. Adenauer has no plan to retire. Even if the Free Democrats join a coalition under the leadership of Dr. Adenauer it would perhaps not continue for long and disruption is bound to come sooner or later unless the problem of the change in leadership is solved well in time.

TURKEY

On 15 September the special court of Turkey which was trying members of the country's former Democratic Party regime of Adnan Menderes delivered its judgment. It will be recalled that the Democratic Party government was overthrown in a bloodless coup in May last year. The trial was conducted on Yassida Island for more than 220 days. More than 600 persons were tried for various charges ranging from violation of the constitution to planning the assassination of opposition leader, misappropriation of public funds, and destroying an opposition newspaper. The prosecution had pleaded for death penalty for more than 100 of the accused. But the special court awarded death penalty to fifteen persons including ex-President Celal Bayar and ex-Prime Minister Adnan Menderes. The other persons committed to death sentence included Fatin Zorlu, former Foreign Minister, Refik Koraltan, former Chairman of the National Assembly, Hasan Palatkan, former Finance Minister, Ahmet Hambi Santar, Chairman of the investigation committee set up by the former Menderes Government to investigate the activities of the opposition. Besides, fourteen others were sentenced to life imprisonment. Among them were four former cabinet Ministers, Deputy Prime Minister Medeni Bork and State Minister Izzet Akcal.

According to the provisional Turkish constitution, the verdict of the court is final. Only the death sentences were subject to the approval of the ruling National Unity Committee which on 16 September commuted 12 out of 15 death sentences to life imprisonment. The twelve cases of commution included the case of 78-year-old ex-President Celal Bayar also. Of the remaining three Mr. Fatin Zorlu and Mr. Hassan Polatkan were hanged on 16 September and Mr. Adnan Menderes, former Turkish Prime Minister, on 17 September. The delay in carrying out the death sentence on him was due to the fact that he had taken an overdose of sleeping pills on 14 September, just before the deliverance of the judgment. As soon as he recovered on 17 September, he was hanged. His wife, Berrin Menderes, made an appeal for clemency but it was rejected.

World public opinion on the whole story of trial and conviction of the members of the ex-Menderes regime is somewhat ambivalent. The main charge against Mr. Bayar and the late Mr. Menderes and their colleagues was that they subverted and violated the constitution, an offence punishable by death under Article 146 of the Turkish penal code. As reports go, all the accused numbering more than six hundred were tried not under a revolutionary law but under an ordinary law of the land. Full elaboration of the case for defence is also reported to have been provided. The President of the court too had an unmixed reputation of being impervious to any official pressure. For these reasons, perhaps, one would hesitate to call the Yassida trial a political affair. But the open question is whether the general population of Turkey is convinced that the trial was not a result of political vindictiveness. If the last July's referendum on the new Turkish constitution can be any guide, the answer to this question can hardly be in the affirmative. The number of negative votes and abstentions at this referendum constituted nearly half of the total electorate, a fact not insignificant to arouse misgivings whether

the present regime of Gursel in Turkey does not enjoy popular support. Even those who thoroughly disliked the erstwhile Menderes regime would regret that the Turkish National Unity Committee did not commute the death sentence in all the fifteen cases. Now that Menderes has been executed, he would be regarded as a martyr by a sizeable section of the Turkish people. Turkey is going to polls on 15 October next and the execution of the late Mr. Menderes is bound to inject a bitter note into the election campaign. The present military regime of Turkey would have done well to grant Mrs. Menderes' appeal for clemency for her husband.

PRESIDENT AYUB'S VISIT OF THE UNITED STATES

President Ayub Khan of Pakistan paid a visit to the United States from 11 to 18 July. On his way to the United States, he made an hour's halt at Beirut on 7 July and also spent quite some time in London. At Beirut he made a statement in an interview and said: "We are concerned at recent events which have hurt the feelings of the Pakistan people, namely, increased aid to India." He expressed the fear that this aid might disturb the balance of power between the two countries. Again, in a television interview in London on 9 July he said that if India made success of her economic planning and became strong and self-sufficient, her neighbours—Pakistan, Burma, Malaya, Sikkim, and Bhutan—would feel very insecure because of India's aggressiveness and would "turn to Communist China for protection". President Ayub Khan also said that the United States by helping India was helping communism. In this very interview he charged India of converting economic aid into military hardware and held out an indirect threat that if the United States continued to befriend India, Pakistan would withdraw from CENTO and SEATO.

President Ayub's visit to the United States began on 11 July when he reached Washington. The same day Mr. Ayub held the first round of his private talks with President Kennedy. In all Mr. Ayub spent more than three days in Washington and conversed with Mr. Kennedy for six hours. On 12 July President Ayub addressed the joint session of the U.S. Congress. He emphasized that Pakistan was the only country in Asia who will stand by the United States provided the latter also supports Pakistan. He warned that if Pakistan failed to guarantee decent living for its people within fifteen to twenty years, it would be overtaken by communism. On the same day, that is 12 July, President Ayub also had a talk with President Kennedy. But only economic issues were discussed in it. problem of Pakistan's security was also discussed at some length. Later, the two Presidents discussed other world problems also. President Ayub Khan expressed concern with the menace to Pakistan's security caused by "India's growing strength" and by the United States help to his "enemies". He also expressed his unhappiness with the importance which the United States attaches to India. During his talks with Mr. Kennedy on 13 July, Mr. Ayub Khan told Mr. Kennedy that he regarded any arms aid to India as "a tremendous strain on Pakistani-American relations." He repeatedly emphasized, however, that Pakistan wanted to live in peace with India. President Kennedy joined President Ayub in affirming that a peaceful satisfactory solution of the Kashmir problem is an immediate need. After the conclusion of three-day parleys between Mr. Kennedy and Mr. Ayub Khan a joint communique was issued. It expressed the hope that "progress towards a settlement would be possible at an early date" in the dispute between India and Pakistan. The communique said the American military aid to Pakistan would be extended to assist Pakistan in the preservation of its security. The two Presidents agreed on the need for outside help to fulfil the financial requirements of Pakistan's Five-Year Plan. President Kennedy promised to find adequate funds to help towards implementing the Pakistan's plan. The communique incorporated a pledge that the United States would soon send to Pakistan a mission of highly qualified scientists and engineers to examine the serious problem of water-logging and salinity. The communique concluded with the statement: "The two Presidents agreed that this, their first meeting, has greatly enhanced the understanding between the Governments of Pakistan and the United States and has contributed substantially to continuing close co-operation between the two nations." A phrase expressing the U.S. desire for a satisfactory solution of the Kashmir problem also found place in the communique.

After the issuance of the communique, President Ayub Khan proceeded from Washington to New York. His visit to the United States concluded on 18 July.

Mr. Ayub Khan's visit to the United States was scheduled for November this year. But on learning that Mr. Jawaharlal Nehru might meet President Kennedy, arrangements for an immediate meeting of Mr. Kennedy and Mr. Ayub were made. Ever since the inauguration of Kennedy Administration Pakistan has been highly critical of America's attitude towards the non-aligned countries and specially of her willingness to help India in her planning. In recent years Pakistan has developed special relationship with the United States. On the whole it can be said that Mr. Ayub Khan returned from the USA with some clear gains and a few major failures to his credit. The Kennedy-Ayub communique promises the maintenance of military aid to Pakistan as well as finances for her Plan. Promise of sending American experts in science and engineering to Pakistan has also been made. A most substantial advantage from Mr. Ayub's visit has been secured by the Kennedy Administration. After reaffirming the value of military pacts President Ayub has in effect given up his earlier bargaining position and has again committed Pakistan to the role of an uncritical and loyal ally. But the Pakistan President did not achieve any of the major objectives he proclaimed before his arrival on the soil of the United States, although after the conclusion of his visit he announced in his press conference in New York that he had achieved the objectives of his visit. He was not successful in his attempt to persuade President Kennedy to revise his policy of strengthening countries like India against communism. President Ayub made a great play of reconsidering Pakistan's membership of military alliance. But whether there is a slightest prospect of his doing so is an open question. Apparently, the dependence of Pakistan on the United States is so great that a change of basic policy in this regard is scarcely possible. Nevertheless, President Ayub's dissatisfaction with the United States to India expressed on the eve of and during his US visit has given rise to a few problems of somewhat serious nature. The most important of them concerns America. President Kennedy remains committed to his friendship with India. But he is also interested in the military alliances remaining intact. Mr. Ayub's threat of withdrawing from them is too much a strain on American diplomacy. At present Washington seems to be pursuing a policy of maintaining good relations with both India and Pakistan. That is why Pakistan has been promised more military aid and better weapons. This is an indication of the U.S. belief that military alliances are the main, if not the only, security against communism.

MEMORIES OF DUM DUM

By H. I. S. KANWAR

IT may sound strange but nevertheless it is true that although Dum Dum has played an interesting and, I dare say, an important role in the history of Bengal and India as a whole, no mention is made in the Guide Books on Calcutta and its environments published from time to time, except perhaps for a passing reference to Dum Dum.

To the casual visitor passing through Dum Dum, it is just another suburb of Calcutta, India's largest city. But, if one spares some time to go round this interesting little township, there would be revealed many places of historical interest and with romantic background, and yet others whose past is shrouded in mystery. Some of the best known spots are Dum Dum House (or Clive House as it is known today), the old Ammunition Factory building, Outram Institute, the Bengal Artillery Monument, St. Stephen's Church, the Corinthian Pillar erected in memory of Colonel Thomas Deane Pearse, the old guns of Dum Dum, which are in evidence almost everywhere, some of them covered with shrubbery, and a number of old bungalows over a century old, all having some interesting tale or anecdote connected with their colourful past.

Ever since the advent of Nawab Suraj-ud-dowlah as the ruler of Bengal, when Dum Dum was a mere insignificant village surrounded with jungle, and that of Clive, Dum Dum began to come into the limelight of Bengal history. With the arrival of the old Bengal Artillery on the scene in 1775, Dum Dum assumed more importance, later to emerge as a famous cantonment, the growth of which forms a romantic tale. It would be recalled that it was from an employee of the Ammunition Factory in Dum Dum that the story of the greased cartridge spread like wild fire all over the country to light the spark of India's First War of Independence in January 1857. Here in Dum Dum also, was produced the once dreaded Dum-Dum bullet. In its heydey, Dum Dum became a cynosure of social life for the elite of Calcutta. Due to absence of a proper book bringing Dum Dum into the limelight, today except for being noted as a busy airport, this interesting place has unfortunately been allowed to fade into the background.

The early history of Dum Dum seems obscure. It derives its name from the elevated mound called Dam-Damma or Dumma-Dumma lying south of the old cantonment, on which stands the fort-like Clive House, formerly known as Dum Dum House, regarding which first mention is made by Robert Orme, author of the "History of the War in Bengal". When Lieutenant-Colonel Robert Clive marched at the head of the East India Company's troops through Nawab Suraj-ud-dowlah's camp at Sealdah on the morning of the 8th February 1757 in a dense fog, he crossed the Dum Dum Road and came across the mound and the building on top of it.

What is the origin of the word 'dam-damma'? According to H. E. A. Cotton, it is of Persian extraction and means a mound or elevated battery. In modern Hindustani, 'dam' pronounced with a soft 'd' means breath, and 'dam lena' means to take breath, or idiomatically speaking, to have rest. Hence, 'dam-damma' could mean a resting place, a contention supported by the fact that in olden times the mound is said to have been a rendezvous where robbers and highwaymen, after their nefarious activities in the region surrounding, collected together for a respite and meanwhile to divide their loot and booty.

There has been a local tradition existing since time immemorial that the mound was the creation and work of a spirit, who built it in a single night. There

is also a local belief that the mound and its environments are haunted, a point first stated by Bishop Reginald Heber, the Protestant missionary, in his diary of 1823 known as "Narrative of a Journey through the Upper Part of India": "The lower storey and the mound are said to be of some antiquity where so many agents of destruction are always at work. Local tradition says that this mound was thrown up by a spirit in a single night and to this day the house and grounds have the reputation of being haunted." As a point of interest it may be mentioned that as recently as the mid-1950s when I personally visited Dum Dum House, the building on the mound, the belief that the place was haunted still persists among the local inhabitants, although none of them could recall any concrete instance of spiritual phenomena having been experienced by either residents of the area in the past or by themselves. However, I do not think that the local Bengalis really worry about this old belief, but like any other superstitious folk just believe in it, that is all to it.

It is but natural that the history of Dum Dum should be intertwined with that of Calcutta, whose environment it is. Hence, it would not be out of place to include here something about events occurring in Calcutta and having influence on Dum Dum. In his masterly chronicle "Ain-i-Akbari" written in 1596, Abdul Fazl the Emperor's Grand Vizier made the first historical mention of Calcutta, then called Satgaon, whence the annual revenue then was Rs. 23,405. By that time, European colonials had already made their appearance here and some had even settled down there. Although the exact date of Portuguese establishment in Bengal is unknown, most historians generally set the date as 1537, when Admiral Sampayo entered the river Hooghly with nine vessels in aid of Emperor Mahmud, who being hard pressed by Shershah had requested the Portuguese in Goa for help. Though Sampayo had arrived rather late for the purpose, Mahmud permitted the Portuguese to establish a factory, which was eventually located near Satgaon and soon to become an entrepot.

To protect their interests, Admiral Sampayo constructed a quadrangular fort at Gholaghat (later corrupted into Hooghly) somewhat midway between the present Jubilee Bridge and Hooghly Jail. Some traces of this old Lusitanian stronghold are still visible in the bed of the river and attract the curiosity of many a traveller. It would appear that the Portuguese did not confine their activity solely to their factory at Satgaon as there is evidence to show that they may have ventured up the river Hooghly. It is strange but true that the old cemetery at Dum Dum in the vicinity of the bungalow known as Number 5, The Mall, Dum Dum contains ancient tombs bearing Portuguese inscriptions on their memorial stones, many of which have since disappeared into the homes of the local inhabitants and used as implements for grinding curry!

Into Bengal, after the Portuguese came the Dutch who established themselves at Chinsurah by 1625. Though carrying on trade in Madras and Orissa, the English did not come up the Hooghly until the mid-17th century period, after having been granted permission by Shahjahan to trade in Bengal on an annual payment of Rs. 3,000. Due to the conflict with local representatives of the Moghul, which culminated in Job Charnock ransacking the Hooghly in 1686, soon afterwards the Nawab of Bengal forced the English out of the area, except Sutanati. In December 1686, the English sent in a demand for compensation to the Nawab. The conflict was more or less finally settled by the Nawab conceding to the English resumption of their trade at the Hooghly. About a year later, Captain Heath succeeded Charnock, and though the English withdrew to Madras temporarily they returned to Sutanati in 1690, when the Nawab of Bengal offered them compensation of over Rs. 60,000. By 1698, August 1 to be exact, the English had worked their way up to procure three villages, namely Sutanati, Govindpur and Calcutta for a paltry sum of Rs. 16,300.

The Regimental Journal of the Buffs, called "The Dragon", dated the 30th April 1869, makes a reference to the laying out of Dum Dum cantonment which "was quite a family arrangement. Each officer in the Regiment selected his own plot, and Colonel Duff marked it out for him. Thus we find the old names associated with early possession of the bungalows: Duff, Pearse, Horsford, Hardwicke, Hind, Pollock, Swiney, Smith, Stone, Ochterloney, Popham, D'Oyly, etc." The above is supplemented by another reference in "I'm Ninety Five", Journal of the 2nd Battalion of the Sherwood Foresters, dated the 1st October 1886, thus: "About 1775 the plains to the North and East of the present Cantonment were first marked out by Colonel Duff, and Dum Dum became the headquarters of the Bengal Artillery and so renamed until 1853 a period of seventy years, when they were removed to Meerut as being more central."

The construction of the barracks for the men followed quite some time later. Actually it took almost fifty years for the cantonment to take shape, and it is on record that until accommodation was made available, the Bengal Artillery used to come out to Dum Dum to practise on the plain, on which occasion the officers made themselves comfortable in Clive House, while the men pitched camp in its grounds. The new barracks were sited so as to contain a fine square. They were made of identical design and structure, and were double-storeyed. Originally there were four barracks, but today only three remain, viz. Numbers 1, 2 and 4. Number 3 was demolished long ago, and four smaller buildings erected on its site. The barracks were turned into a jail in 1935 or 1936, housing prisoners instead of soldiers who stayed in them before, except that Number 4 Barrack is now a hospital block.

In the centre of the old barrack square there was a flagstaff at the base of which there was a "a very handsome old bronze gun which was probably left in or near Dum Dum by Nawab Suraj-ud-dowlah when he retreated from the vicinity of Calcutta, and which bears unmistakable marks of having been in a very hot corner in some old hard fought action." Quite close to the west of the barracks was a large tank, around which the local traders built shops to cater the needs of British soldiery in the cantonment. Aptly enough, this shopping centre came to be known as the Gora Bazar, which originally comprised two long rows of shop-houses running along a narrow road, known today as Station Road.

Although the origin of the old Bengal Artillery dates back to 1749, it was not until 1775 that its headquarters were moved to Dum Dum. As the cantonment grew in size, other buildings were erected to provide officers' messes and the soldiers' canteen. The long single-storeyed building next door to St. Stephen's Church was the first officers' mess of the old Bengal Artillery Regiment and remained so for over fifty years. Fairey Hall was similarly used by the officers of the 2nd Derbyshire Regiment some time later. Another famous building was the officers' club in the old Horsford bungalow. As in most other cantonments in India at the time, a Masonic Lodge was also built. This building may still be seen on Jail Road. It was once a fine edifice of attractive design and structure, complete with underground chambers used for the secret ceremonies for which the Masons have long been famous, but today it stands in a rather delapidated state.

In the old days when the officers' club was housed in Horsfold Bungalow, there used to be an interesting story attached to it. A cantonment rule then existed whereby lights in the cantonment area had to be put out at a fixed time. The officers to a man objected to the rule, and soon managed to get themeslves exempted by having their club building delineated outside the cantonment limits!

In 1853, the headquarters of the old Bengal Artillery moved over to Meerut. Seven years later, the officers' mess vacated by them was purchased by the Govern-

ment, who converted it into an institute and reading room for officers and soldiers and named it the Outram Institute, as a memorial to Sir James Outram. As such, the place provided a good means of diversion for the soldiers who made better use the canteen than the reading room. As liquor was very cheap in those good old days, it flowed freely in the hall of the canteen. The situation soon began to give anxiety to the authorities, who decided to increase the price of beer and rum sold in the canteen with the ultimate object that the higher price of these two commodities would restrict the quantity consumed by the soldiers. This step was misunderstood by the soldiers and the atmosphere might have grown worse but for the fact that the authorities soon gave a very tactful reply which satisfied the soldiers.

The following extract from a news item which appeared in The Statesman, dated the 25th June 1879, will provide interesting reading:

"There seems to be some misunderstanding in the public mind regarding the system on which the canteens of the Bengal Army are conducted. In the Madras Presidency a free canteen, i.e., a canteen in which a sober soldier can obtain as much beer as he likes, has been for some time the rule. The price of beer is raised under this system to four annas a quart, to protect the State from increased loss by increased consumption. The price of rum has also been raised to two annas, and is only issued in half drams, so there is no longer, under this system, any 'issue' of rum. It can be obtained at any reasonable hour the soldier wishes, and thus the temptation to drink the 'allowance' is lessened. This system is being introduced gradually into all regiments and batteries in Bengal and Bombay as they arrive in India, and may also be adopted by Commanding Officers whose men are under the old rules, should they so desire. As a matter of fact many have adopted the new system."

An old-timer of Dum Dum told me that in 1926, the institute building was used by the Dum Dum Club, and a few years later it was taken over by the Bengal Flying Club which occupied it for the duration of its activities in Dum Dum. Today, this famous edifice is utilised to accommodate the jail staff and their families.

Some of the old bungalows in Dum Dum have queer tales about them, one being about Number 29, Jessore Road, whose original owner and resident was Captain Thomas D'Oyly. In 1833, proceeding on furlough to Australia, Captain D'Oyly accompanied by his wife and two young sons sailed from Clacutta in the barque "Charles Eaton", which was wrecked en route in the Torres Straits. All aboard were reported lost except D'Oyly's younger son called Charles, who was adopted by the cannibals of Murray's Island. The story further related that the young D'Oyly later succeeded his uncle in the baronetcy and became a majorgeneral in the Indian Army. Romantic as it may sound, on investigation this tale was found to be without basis as Captain D'Oyly's sons were actually called George and William.

There are a number of old guns at various places in Dum Dum. There are two at the entrance of the present Gun and Shell Factory, two which form the posts of the main gate of a bungalow opposite this factory, two at the crossing of Jessore Road and Jail Road, two on Pollock Avenue, and others elsewhere. Then, there are twelve (incidently of two distinct types) around the Bengal Artillery Monument. Such guns can also be seen just outside the perimeter of the old cemetery along the main Jessore Road, apart from the places already stated above. The guns at the entrance of the Gun and Shell Factory were probably sited there in 1846 when the factory was built, while those around the Bengal Artillery Monument date back to 1844.

The two guns forming the posts of the main gate of the bungalow opposite the factory were brought to their present site in recent years. In 1939, when the bungalow was built, these guns lay on either side of the main Jessore Road nearby. The owner of this bungalow is said to have procured the guns with the permission of the cantonment authorities. Since the guns were too heavy to be lifted by a few labourers, he employed twenty Oriya labourers to have the guns dug out and remove them to their present location. They are indeed beautiful pieces of curio. He told me that the base of the guns is about four feet below the ground level. Of fine steel, the guns are in excellent condition and without rust to this day, despite their age of over a century. As a point of interest the owner mentioned to me that when he built his house in 1939, there were two artificial hillocks situated to the south of his house. The depression between these hillocks, which had been constructed by artillery personnel, was used by the British for testing gunpowder in the old days, when they ran the Ammunition Factory. He was given a contract by the military authorities to demolish them. He therefore built a kiln nearby and completed the demolishing by making bricks out of the earth obtained from the hillocks, a venture from which he made a sizable profit. Later, he bought the land around the hillocks' site, and constructed a two-storeyed bungalow.

He also mentioned in passing that the tank between his house and The Mall was once in use for chemical washing, when the Ammunition Factory produced the old and notorious Dum Dum bullets. The tank was then known as Magazine Talao. In recent times, he had obtained authority to cultivate fish in the tank. There is a much smaller tank immediately to the south of his bungalow. The chhota tank is connected to the old Magazine Talao by means of a tunnel. This small tank was also used by the British at the Ammunition Factory. He told me that an old contractor once related to him a rather fantastic tale that if the small tank was dug further he might find old types of pistols and guns. He actually laughed at the idea for he said that the old contractor's tale is far from reliable. Thus the mystery of the old weapons under the chhota tank still exists.

Returning to the subject of the old guns, there are some on mountings. There are four of them in a vegetable garden opposite the Dum Dum Jail, and one at Alexander Lodge in the Gora Bazar area of Dum Dum. A very interesting lot comprising three large guns lay in a hangar at the airport. I was told by an aeronautical engineer working in this hangar that since the guns had been found too heavy to be lifted by the biggest crane then available at the airport, there was no alternative for the authorities but to build the hangar round the guns! It is evident that the guns had been there for a very long time. On closer inspection, I found that there are inscriptions on the guns dating back to the early 19th century. The guns bear the name of Messrs. T. Murphy, presumably the makers of the guns. It may be surmised that these historic pieces have been here since the days when the old Bengal Artillery practised shooting there during the training season. According to R. C. Sterndale, "The Cantonment and Station of Dum Dum were not established until nearly fifty years later, but the Bengal Artillery used to come out to Dum Dum to practise on the plain, when the officers used to occupy the old building (Clive House), while the men were encamped in the grounds."

A few years ago (about the years 1955-56), I understand that the above-mentioned guns were somehow removed to their present location, near the main porch of the Terminal Building of Calcutta Airport, by the civil avitation authorities stationed there. In recent months I had brought these guns to the notice of General J. N. Chaudhuri, the GOC-in-C of Southern Command, who I believe has set the ball rolling to acquire these beautiful pieces of antiquity for the Army.

While going through Bengal Past & Present Volume IV, July-December

1909, some time ago, I came across the following most interesting reference on page 611:

"There is a Trophy Gun in the grounds of the Ammunition Factory Institute of the following description:

Trophy Gun, believed to have been captured at Plassey.

Length overall, 14' 10"

From breech moulding to muzzle, 13' 6"

Diameters: base ring 30.35", muzzle moulding 23.5"

Reinfree 18", from breech moulding 28.8", 1" behind trunnions 25' 5"

Chase 1", in front of trunnions 24"

Neck 20", trunnions 8"

Bore 9.02", length of bore 12.8"

Calibre 92 pr., weight $10\frac{1}{2}$ tons

The bore is lined with $\frac{1}{2}$ inch iron bars placed longitudinally and screwed with square brass screws, bearing the inscriptions:

On breech: "In the 18th year of reign, this gun was cast in Fort Assiri (Agra) in the time of Muttra Dass, son of Ramjee."

Above trunnions: "Abdul Zuffardin Muhamad Amrezi, Bahadur Alumgir Badshah Gazi. 1085 (A.H., A.D. 1668)."

It stood in the Barrack Square and was removed to its present position in 1907. The carriage is an exact reproduction of that in existence when the gun was moved, which was destroyed by white ants. The gun is known as the Plassey Gun, but the authority for its title is doubtful."

That the above-mentioned gun was once situated in the Barrack Square (which presently forms the open space in the centre of Dum Dum Jail), is supported by a reference available in the Journal of the 2nd Battalion of the Sherwood Foresters, "I'm Ninety Five", dated the 1st October 1886: "Dum Dum possesses a fine barrack square surrounded by airy two-storeyed barracks. The centre of the square is occupied by a very handsome old bronze gun which was probably left in or near Dum Dum by the Nawab Suraj-ud-dowlah when he retreated from the vicinity of Calcutta, and which bears unmistakable marks of having been in a very hot corner in some old hard fought action."

As everyone now knows, the Plassey Gun is no more in Dum Dum. In response to a query by the writer of this article, the Superintendent of the Reading Room at the British Museum, London, in his letter dated the 9th July 1954, replied, "I have been in touch with the staff of the Imperial War Museum about the present location of the cannon which stood in the grounds of the ammunition factory at Dum Dum and they say that they have no evidence that it was ever brought to England. They suggest that the only person who is likely to be able to assist you in this search is the Director of Artillery at GHQ, Delhi." I am sure that readers would be further interested to know that a query sent by me to the latter brought the reply that no information was available in that office, and thus, the present whereabouts of the Plassey Gun remain to be discovered. It is to be wondered whether the office of the Director of Artillery has since made any effort to ascertain any further information about this gun which may turn out to be of utmost historical value and well worth preserving in a suitable location. An organised search in all cantonments all over the country by the antiquarians among officers of the Army, especially the gunners, may yield results.

Situated hardly a stone's throw from the main Dum Dum—Jessore Road and adjacent to the Gun and Shell Factory in Dum, stands the Bengal Artillery

Monument. Actually it lies on Monument Road, a more or less kutcha track connecting the main highway to The Mall, which was once the pride of the cantonment but now exists in a delapidated condition. The monument, resembling a cenotaph, stands nearly 100 feet high. Working from the ground upwards it consists of a square pedestal, a cubical block, a cylindrical column and a minaret topped with a symmetrical steel structure. From a distance, the monument looks rather like a lighthouse.

When it was constructed, a dignified enclosure was provided with guns as posts at the four corners and the two entrances. Looking along any side, one observes four guns in a row. On the east and west sides, entrances were sited for the purpose of facilitating military ceremonials. The steel chains which once linked the guns round the enclosure were lying loose (as far back as 1954) all over the ground. These guns, which are of about four inch calibre, are reminiscent of those used in India in the first half of the 19th century. The fact that they have weathered over a century of wind and rain bespeaks of the excellence of their steel composition. They are about ten feet long and well dug into the ground, above which only four feet are visible. On the top of each corner gun, an iron lamp-stand of attractive design and crowned with a cagelike structure provided for housing oil lamps was erected. The tops of these lamp-stands were about ten feet above the ground. Simple but dignified in shape, they were similar to those in vogue in 19th century England. Only one or two lamp-stands exist today, the rest having disappeared as a result of vandalism.

Both the grey marble tabloids are in good condition to this day, the inscriptions on them being quite clear despite the scratches made on them by idle passerby. Due to absence of maintenance for many years, the plaster at the edges has become weak. When the writer tried to remove a shrub in order to photograph the eastern tabloid, the plaster easily came off with the roots. According to the inscription, the tabloids were supplied by Messrs. Holmes, Sculptors, in 1844. Incidently, Holmes & Co. were also the publishers and authors of that valuable but now scarce book "The Bengal Obituary, or a Record to Perpetuate the Memory of Departed Worth", published in 1848, when their office used to be at 39, Cossitollah, Calcutta. While the e stern tabloid simply states the roll of honour of Non-Commissioned Officers and Gunners (the list comprising 6 Sergeants, 6 Corporals, 11 Bombardiers, 2 Rough Riders, 2 Farriers, 3 Trumpeters and 66 Gunners), the western tabloid bears the following most interesting inscription:

"To the Memory of Captain Thomas Nicholl, Lieut. Charles Stewart, Sergeant M. Mulhall and the non-commissioned officers and men of the 1st troop, 1st brigade, Bengal Horse Artillery, who fell in the performance of their duty during the insurrection at, and retreat from Cabul in the months of November and December, 1841 and January, 1842, on which occasions of unprecedented trial officers and men upheld in the most noble manner the character of the regiment to which they belonged this gallant band formed the oldest troop in the Bengal Artillery. It had previously been distinguished on numerous occasions having served in Egypt, the Mahratta and Nepaul Wars, and in Ava. Also to the memory of the undermentioned officers of the Artillery Lieut. Charles Alexander Green, who perished in command of a detail of Shah Soojah's Mountain Train and whose gallant conduct emulated that of his Comrades Lieut. Richard Maule who was killed in the outbreak of the insurrection in November, 1841, and Lieut. Alexander Christie killed in the Khyber pass on the return of the Victorious Army under the Command of Maj.-Gen. Sir George Pollock, G. C. B. of the Bengal Artillery. This column is erected by the regiment as a tribute of admiration, regard and regret. Fortis Cadere Cedere non-potest. 1844.

Holmes & Co. Sct."

The Bengal Artillery Monument was sited in this particular location because it was right opposite facing the officers' mess of the Bengal Artillery, then housed in the building later known as Outram Institute. As would be observed today, this building is used for accommodating the staff of the Dum Dum Jail. From the main entrance of the mess, the monument presented an imposing sight. When the Ammunition Factory was being constructed in 1846, the proposed main entrance would have obscured the above-mentioned beautiful view. There was a protest from the officers of the Bengal Artillery, on account of which the authorities decided not to build the proposed main entrance. They altered the same to be built at an angle to the Jessore Road. This was satisfactory to all concerned, because the resulting view from the officers' mess, though not so good as previously, did not obscure the monument from view.

As may be observed today, the beauty of the monument and its surroundings has been marred by lack of proper maintenance. The plaster has been worn off at several places, of late, even a pipal tree has taken root more than half-way up the column. Mildew covers the major part of this column, disfiguring its appearance. Cracks are visible at some places.

Despite the above, the Bengal Artillery Monument is quite a centre of attraction, especially during the summer. Children of the folks in the neighbourhood come here to play in the evening, attended by their chaperones, who park the perambulators in random fashion near the steps. Vendors passing by unload their wares here, to have a respite and enjoy a smoke undisturbed. During the afternoons, the wearied utilise the landings of the monument as a haven for a peaceful siesta after their mid-day meal. On the lighter side of life, the monument provides a convenient retreat to the love-lorn in the vicinity after dusk.

To be concluded.

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BOOK REVIEWS

The Edge of the Sword by Charles de Gaulle. (London, Faber, 1960), 118 pages.
Price 26sh.

Although this book was written shortly after the end of the First World War, it was published in France only in 1944 under the title *Le Fil de l'Epee* and its English translation by Gerard Hopkins has seen the light of day only now. The ostensible purpose of this book was to consider the position of the French army after four years of terrible experiences and its prospects as a specialized body within the structure of the State. But this is only an excuse for General de Gaulle to give a detailed dissertation on his favourite theme of what constitutes power, greatness and glory in this world of mediocrities.

Combining in himself immense personal force with high purpose and capacity for constructive achievement, there is no gain saying that fewer men today are more richly endowed with elements of greatness than de Gaulle. Not only does his great height and peculiar physical features set him apart as an outstanding public figure of the century, but his mind too is cut in generous dimensions as this book amply testifies. With quotations ranging from Shakespeare, Goethe, Valery and Musset, the General reveals his special understanding of the massive events of the historic past to emphasise his theory of domination, as is clearly evident in the following lines:

"What is important is that the ambitious, more especially those who hold high rank, should be filled with the spirit of enthusiasm, and be obsessed by the necessity of finding in life an opportunity to leave their mark upon events: that, from the shore on which they live their uneventful lives, they should direct their eyes with longing to the stormy seas of History! It is for us to see that such men, in spite of the confusions and illusions of our times, should never be driven to despair, or become the victims of disappointment. There is no soldier who, by winning fame for himself, has not served the hopes and aims of high policy, nor any statesman who, by the greatness of his achievements, has not won a still greater glory by contributing to the defence of his country."

Thus his arguments centre not so much on the tactical and technical problems of warfare, as the mental and moral qualities needed in the conduct of war and for the training of soldiers. Leadership is the guideline of his life and this is treated under various headings, viz., Character, Prestige, Doctrine, etc. Although written nearly 40 years ago, the book provides ample indications to prove that neither Roosevelt who described him as "essentailly an egotist" nor Churchill who called him "the man of destiny" and later as "the constable of France", was far off the mark.

Nehru on World History; Condensed by Saul K. Padover from Glimpses of World History by Jawaharlal Nehru. (London, Bodley Head, 1961). 304 pages. Price 21sh.

This is by no means a new book, but only selections from Nehru's "Glimpses of World History" written many years ago. The only addition in it is an introduction by the editor on "Nehru's Philosophy of History." One may as well ask: "Has Nehru a philosophy of History?" As the editor himself notes, Nehru is neither a historian nor a philosopher in the traditional sense of the terms. But he is a "Philosopher in action." Often philosophers in action know more about philosophy and history than others, who are divorced from action, and as such their version of

history is worth knowing. There are other books on the history of the world which are superior to Nehru's book in regard to the attention they have given to facts and details. Nehru has only given some glimpses in this book; but he has more than compensated the paucity of facts by giving an insight to the currents of history.

In this selection the editor has omitted further those few events and movements which Nehru had treated with dry factuality. His "guiding principle in the condensation has been universality of interest combined with unconventionality of interpretation."

Even these selections reveal the historical sense of Nehru. Perhaps no other living statesman of the world knows so much about the histories of different parties. A Churchill's imagination did not go beyond the history of the English-speaking people, while others were wedded to one doctrine or other as far as their historical apporach is concerned. Nehru, the universal man, is at home wherever he traverses, whether it is ancient Rome or China or it is modern American or the Soviet Union. He has no loyalty to any doctrine also. He is at his best when he analyses the currents of history and explains what is feudalism, capitalism, imperialism and nationalism. Revolutions are another special field of his interest. Because such broad topics are often treated in a general way, some parts of the book are superficial. But it will be very valuable to the lay man because it is one of the rare books which, while covering so many subjects, have succeeded in giving an integrated pricture of the history of the world.

K.

Panch Sheela and After by Girilal Jain. (Bombay, Asia Publishing House, 1960). 241 pages. Price Rs. 12.75.

The author of this book had earlier written with competence on the problem posed by China for India's foreign policy. In the present book, Mr. Jain has again marshalled a large amount of facts to prove his thesis. However, the thesis itself would seem to be the result of a degree of exaggerated concern about the Chinese problem. It is, of course, admitted that the Chinese problem is formidable but the picture drawn by Mr. Jain would make it appear as if India is the immediate target of a diabolical conspiracy hatched jointly by China, the Soviet Union and the Indian Communist Party. There would be few who share Mr. Jain's conviction that the Communist world is for all practical purposes monolithic and that the incursions by China are but the thin end of a grand Communist wage into this region.

While there would be many who differ from the author's broad line of argument and many would contest his assertive conclusions, there is no doubt that he has attempted to study the Chinese problem with great thoroughness. It was obviously not Mr. Jain's purpose to objectively analyse the India-China question, the indelible impression he leaves on the minds of his readers is that he was attempting to make the country conscious of the danger from China by understating the hopeful aspects of the situation.

S.G.

The Battle of the Nile by Oliver Warner. (London, Batsford, 1960). 184 pages. Price 21sh.

The Battle of Matapan by S. W. C. Pack. (London, Batsford, 1961). 183 pages. Price 21sh.

These two recent publications in the Batsford series of British Battles, though dealing with periods of history separated by nearly 150 years in time, are similar in this respect that they both describe critical naval battles fought by the Royal Navy in the Mediterranean against would-be world conquerors. Mr. Warner, whose

Trafalgar has already appeared in this series and who has also published a biography of Lord Nelson, has given us a fascinating and vivid account of the Battle of the Nile, one of the classic naval actions of history; and Capt. Pact has recorded for us the Battle of Matapan, fought on 28th and 29th March, 1941 between British and Italian fleets.

Mr. Warner's approach to the subject is the same as it was in his earlier book: the scene is set, the circumstances under which the battle was fought are made clear; the commanders are introduced so that the reader comes to know them as human beings no less than as naval captains; the action itself is graphically described, largely though the eye-witness accounts of participants; and the battle's aftermath is followed though in a way which relates the particular action to the war as a whole.

From the narrative, no less from the general perspective, the reader is constantly made aware of the decisive nature of this action. Like the Alamein Battle, fought only a few miles away a century and a half later, Nelson's victory in this battle was the first major reverse of the enemy in a long drawn out war. The Nile was a victory as overwhelming in its effect as it was brief in action.

Capt. Pack's account of the Matapan Battle has the advantage of being authoritative in that the author was himself present throughout the action in the carrier Formidable—and thus he combines the vividness of an eye-witness account with the objective appraisal of historian.

In March 1941, Britain faced the Axis powers alone. Her army was still in disarray after Dunkerque, her fleet was stretched to the utmost. It was in this context that, 100 miles off Capt. Matapan in Greece, there was fought an action in which the Italian fleet was so signally defeated that it never voluntarily offered battle again so long as the war lasted. The engagement, the first major fleet action since Jukand, a quarter of a century earlier, was of historical importance for two reasons; it was the first time carrier-borne aircraft had played a vital role, and the first time that the use of radar was of preponderant importance in a large-scale fleet action.

As with other works in the Batsford series, both books are amply illustrated by photographs and sketches, making the accounts of the actions the more engrossing.

D.K.P.

Distant Drum by Manohar Malgonkar. (Bombay, Asia Publishing House, 1960). 257 pages.

It is only in recent years that our army has become a popular subject for writers, and readers alike in India. This is due to the pride we in India take in our men in uniform, and unlike the characters from Kipling we can do so without a guilty complex which is so natural for an Indian reader of that master story-teller.

Manohar Malgonkar too has a touch of Kipling genius for story telling. "Distant Drum" is a good story, cleverly told from the point of view of an Indian officer who joining his regiment "The Satpuras" shortly before the second World War, takes us through the periods of pre-war "peace," war in Burma, the horrors of Partition in Delhi and his experience in Jammu and Kashmir for a brief period before and after the Cease Fire in 1949. However, most of this is in passing, for the locale of most of the incidents in the novel is service in Delhi while the officer is in the "Monkey House", as Army Headquarters is often called. We meet almost all the army 'types' of the period and are given a thorough grounding in the whole business of being "an officer and a gentleman". Although there does appear to be

an element of the caricature, the main characters are neatly etched. The battle descriptions are superb, and in spite of the very heavy camouflage employed to cover up places and people, to the service reader, most of the scenes and persons stand out most life-like: even the "female interest", in war and peace is well maintained. At times one might be forgiven to think the scene at a regimental Dinner Night, with the pipers walking round the dining table when the meat course is being served, has not been depicted tongue-in-cheek. But then the whole story could be looked at in the same light. Does the author really believe that the attempts at "out-Britishing the British" so noticeable during the period immediately after Independence was really the best for the army? It is true that the three basic rules drummed into the heads of all officers joining the Regiment, must hold good in any army. So would the whole scheme of perfecting the technique of "taking it" and "dishing it out". But what is difficult to swallow is the constant reminder that at all times the good officer has to look back and consider what some one before him would have done in the "good old days". The book thus looked at might only be an object lesson in what another well-known Ex-Indian Army Officer wrote recently in an American Journal about the ritualistic preservation of the silver his great-grand uncle had presented to a Cavalry Regiment about a century ago. Was this in the memory of great Captain of the past or was it an attempt to cling to something which looked solid and tangible even if we did not understand it, because we had evolved nothing of our own in the way of our own custom or tradition.

It is interesting to speculate how the book had originally ended. Had the author made the dashing Lt.-Colonel Garud into a "box-wallah" when there was the chance for anyone who disagreed with the New Pay Code to ask for the traditional "bowler hat"? Had the two chapters which had been excised from the book dealt with that priceless portion of the army—the "jawan" whom we find figuring so little in the book in its present form? Possibly we shall never know. On the other hand, now that officers of "the class of 37" are putting on the badges of rank of general officers, the author might well take us further forward and portrary the scenes of the present. He and the general reading public, are sure to find some changes and we in the army could well do with the mirror being held up to us, the better to be able to see ourselves as others see us.

A.M.S.

The Camp Across the River by J. W. G. Morgan. (London, Peter Davies, 1961).
192 pages. Price 16sh.

The author was a temporary officer in the Royal Federation Police Forces, and in "The Camp Across the River", he relates some of his experiences which befell him while serving in Malaya during the "Emergency", as the "shooting war" against the Communist guerillas there was called. In this book we read of many of the actions in which Mr. Morgan and his men took part in, and from the military point of view we see him conducting himself most ably in attack and defence, patrols and ambushes. Throughout, the narrative is clear and crisp, and the action takes us along at a spanking pace. We are spared none of the grisliness of the situation, and each shot, wound or death is faithfully, and gorily described; the oozing blood seeping across the white blouse of the woman 'guerilla', the brains and guts spattering out of shot-up bodies. In fact, there seems to be a surfeit of these, and at times one is led to wonder whether one is not reading a "Western" novel. But the reader is brought to earth with a thump to read the author's "epilogue", in which he gives out his firm conviction—his fear that the Malaya he left behind him, might not really be safe from the militant communists he had fought so long. "... I believe they are watching and waiting until the time comes for them to pounce again."

One may well leave the book at that, a book just to 'blood' the young soldier, to show him the seamy side action, especially when conducted against a guerilla type of enemy, and to teach some of the stratagems and tricks without the knowledge of which no fighter can live to fight again.

The thoughtful reader might, however, well be troubled with some doubts as he closes the last pages of this book. The very first of these will be the role of the armed police operating in an emergency. Here in India, as happened in Malaya during the emergency, armed police are used fairly extensively, alongside troops. This book brings out clearly how similarly the armed police and the army operate and yet it delineate the differences also. The dangers the police face are no less than those faced by troops—in fact, although the intensity of fighting might be less, but the duration of deployment is longer. The police do not have the quick turn-over which troops are accustomed to. And although the Royal Federation of Malaya Police Force seems in this book to have been fairly well armed, the number in which they operated was indeed small. The operational orders on which they worked were brief and clear, the time they required to mount a local operation could be counted in minutes. On these, and other grounds their operations seem to be a model for the regular infantry, who seem to have been cluttered up with cumbersome procedures. But throughout this book the reader is also left with the feeling that these tough policemen have a chip on their shoulder; some of the shooting seems to go beyond the mere right of self defence, or for that matter in exercise of "minimum force". And yet, in the conditions of the "Emergency" such distinctions were hard to apply.

It is of course possible that the author's burning hatred for the communists somehow creeps into all his thoughts and actions. What right he might have had to fight "with a burning fire in his belly" is not questioned, but to the military reader its exhibition time and again in the pages of this book appears to be embarrassing, to say the least. When it comes to the incident of Panja, the Punjabi Constable who incites his squad to the point of mutiny but does not succeed, although there might be much truth in the actual narration of the event, the reader is left with the feeling, that although the author might have realised with his intellectual powers that the days of the white man in Malaya were nearing their end, he himself has not been convinced in his emotional being of the acceptance of this fact. It is this aspect of the book which rings a bell with the Indian reader of the days soon after our Independence when the English language press of Malaya exuded a veiled tenor of anti-nationalism; of the impression which was trying to be created which implied that India and Indians were not necessarily a model for Malaya. It does seem ironical, however, that the "Emergency" should have come about so soon after 1947. Another possible reason why some aspects of this book seem to grate the susceptibilities of the Indian reader is the fact that there appears to be a be-wailing of the shedding of the "white man's burden".

A.M.S.

In Place of Folly by Norman Cousins. (New York, Harper, 1961). 224 pages. Price \$3.00.

The author of this book is famous as editor of the Saturday Review. He has written several other books which are noted for their penetrating inside into the many complex problems confronting humanity today. This book deals with the problem arising out of the use of nuclear energy for war purposes. The book has grown out of Bertrand Russel's observations that man has since the beginning of time indulged in all kinds of folly. Russell's view is that the climax has been reached by the harnessing of nuclear energy for war purposes.

The primary aim of this book is to establish the view that the world and everything in it can be made safe for man. Broadly speaking, the book falls into two parts. The first part deals with the horrors of nuclear war, and the hazards of nuclear testing. The second part elaborates an argument in favour of a peaceful solution of human differences.

The hazards caused by nuclear explosions are well known. The extent to which radio-active substances are capable of causing harm to mankind is a matter on which vigorous scientific research is now in progress. Some of the latest findings of scientific research on this subject are discussed in the opening chapters of this book. These facts make unpleasant reading, since they confront humanity with the prospect of death. It is now widely accepted that even the explosion of nuclear weapons for test purposes poses a grave hazard to mankind. There can be no doubt that something effective has to be done to curb this menace. What is to be done and how? This is the main theme of the second part of the book.

There can be no doubt that the United Nations has to function as the principal agency in the modern world for the formulation and implementation of a world policy regarding the control of atomic energy. The idea that the development of atomic weapons and stock piling of dangerous missiles is a deterrent has to give way to an agreed solution to the present conflict between two groups of nations in the world today. There can be no doubt that the preservation of peace requires mutal understanding and international cooperation. This book contains a chapter on how such a peaceful solution might be achieved. This chapter needs to be studied with care and considered in all seriousness. The author has suggested that violence has become ingrained in human nature as a kind of habit, which must be broken. The cardinal fact of the matter is that "It is not enough for man to profess oneness with other man; he must act it out."

W.T.V.A.

Cuba — Anatomy of a Revolution by Leo Huberman and Paul M. Sweezy. (London, Routledge & Kegan, 1960). 207 pages. Price 25sh.

The abortive invasion of Cuba last April had focussed public attention on the issue of U.S. role in Latin America and provoked critical world Press comments. While appreciating President Kennedy's difficulties, the predominant view held was that it was indefensible on the part of America to set out to overthrow the Castro regime, acknowledged to be the legitimate Government of Cuba. This book sets out to describe the unique revolution effected by Dr. Castro by overthrowing the Batista regime and the need for such a publication cannot be exaggerated when one remembers the apt comment of Herbert Mathews:

"In my thirty years in the New York Times, I have never seen a big story so misunderstood, so badly handled and so misrepresented as the Cuban revolution."

The authors, combining the methods of journalism and scholarship, have produced a rounded analysis of one of the most original and important social transformations of the decade. Dr. Castro's revolution is unique, as it was basically middle class in nature, which later turned against that class and tried to assume the colour of a peasants' or workers' revolution. This turist was naturally taken advantage of by the Communists who began to fan the flames or revolt all over Latin America and to give moral and even material support to the various revolutionary movements.

The U.S. was, therefore, much concerned to "contain" the Cuban revolution and if it cannot be overthrown at least to prevent it from over-flowing the Cuban shores into the neighbouring countries: with what success it was able to stem the tide, recent events have proved. The book under review describes in detail the dramatic, social and economic changes effected in Cuba such as agrarian

reforms and nationalisation of foreign-owned enterprises and of the economy in general. The early pages describe in detail the background of the rich land of Cuba from the day when Columbus was struck with its charm that he called it, "the most beautiful land human eyes have ever seen".

The story is then told of the degradation of the people caused by foreign domination and the valiant efforts made towards freedom. The authors after analysing the structural reforms carried out by the revolutionary regime come to the conclusion that the country would be able to weather the economic and political warfare, which is being "waged against her by the United States and its allies in Latin America" and that it would be impossible to "Guatemalize" Cuba and add:

"Nothing short of a full-fledged invasion with the U.S. Army, Navy and Air Force would hope to achieve a military overthrow of the revolutionary regime in Cuba."

S.R.

British Foreign Policy Since the Second World War by C. M. Woodhouse. (London, Hutchinson, 1961). 225 pages. Price 30sh.

The author admits in his introduction that the book is only superficial. It deals with contemporary British policy and such a study can only deal with the surface of events. Be that as it may, the subject is one which merits more than superficial investigation and in view of the fact that other books have already been published giving the matter more detailed investigation, the present volume can at best be regarded as a general commentary and summary.

The summary falls into three parts. Part One deals generally with the Cold War from 1945 to 1949. Part Two shows the British reaction to these events, including the relations of HMG with the United States, and the resolution of the former British Empire. In Part Three the author attempts a summary of British achievement in foreign policy and a brief glimpse at British prospects in the world. It is by no means a history of British foreign policy during this period, none of the major episodes being recorded seriatim.

Some subjects crop up again and again in the book, because of their many relevant aspects—as for instance the Suez crisis—but there is no definite conclusion or criticism. At best the author's views can be described as a negative approval of the foreign policy of the Conservative government. Even in the case of Suez, the author feels that, after all, it could not have been handled differently.

In his final chapter, the question of the nuclear deterrent has been discussed. The author feels that the possession of nuclear weapons, or rather nuclear capability, by Britain added significantly to the power of the deterrent. Because of the development of an experienced and powerful Bomber Command in the Second World War, Britain's nuclear capability was far more significant than could ever be that of France, which had not that experience. Britain could use nuclear weapons on her own, even without the U.S.A., and this constituted an important influence on Allied policy, and also presumably on Soviet policy. It is to be wondered whether the author would express the same opinion if he were writing in 1961.

Mr. Woodhouse, before he entered Parliament, was Director of the Royal Institute of International Affairs, and the reader would have been justified in expecting a more definitive criticism of British foreign policy. In this book, he has to be satisfied with a vaguely expressed support of the status quo.

PK.P.

My Chief by Mohammed Ahmad. (Lahore, Longmans Green, 1960). 111 pages. Price Rs. 8.50.

In Khrushchev's secret report to the 20th Congress of the Communist Party of the Soviet Union, one of the complaints made against Stalin is that he resorted to self-glorification and that in the short biography published in 1948 all the corrections the Communist dictator made were of paragraphs which he thought did not sufficiently praise his services. And then he added a paragraph: "Although he performed his task of the leader of the Party and the people with consummate skill and enjoyed the unreserved support of the entire Soviet people, Stalin never allowed his work to be marred by the slightest hint of vanity, conceit or self-adulation." The biographer of Ayub may not have been suffering under as many disadvantages as the biographer of Stalin but in a letter to the author dated 18th March, 1960 (incorporated in the book), President Ayub Khan had given a few additional points for his consideration and incorporation, if he so felt inclined: (1) "By nature, I have attachment with principles rather than with individuals." (2) "My main concern in the administration of the Army was to establish the Rule of Law, as opposed to personal rule." (3) "I have a faculty of judging human beings." Even without these additional points, the biographer of President Ayub Khan has presented an account of the Pakistan leader which shows him to be a leader of extraordinary calibre, breadth of vision, wide and humanitarian interests and patriotic zeal.

The President of Pakistan had been very much active in politics behind the scene ever since 1954 and though, according to this book, he refused an offer to take over in 1954, it is clear from the account given that the succession of political depended on him for sustenance. For example, he could ask the President and Prime Minister to "behave" well. Iskander Mirza and Suhrawardy had fallen out and within a day, the two had made up! However, when he openly took over power in October 1958, there was an obvious need to build him up as a leader with a difference and as the saviour of Pakistan. The present book is one of the many ways in which this has been attempted and it is not surprising that in one of the recent American books on great political leaders, the Pakistani whose biography is included is Ayub Khan and not Jinnah.

The book reveals very vividly, as said above, the extent of influence exerted by the Army in Pakistan particularly, the Commander-in-Chief during the last days of parliamentary rule and also establishes a fact not so well known outside that the Pakistan Army's rise to power was a gradual process and not an abrupt event. While these portions of the book would be found very interesting, the author has evaded the narration of some other parts of the mysterious history of those days in Pakistan. For example, there is no explanation whatsoever as to why President Iskander Mirza was dismissed in three weeks' time by Pakistan Army and why the dual rule of Ayub and Mirza could not continue.

It is difficult to be sure in identifying Ayub Khan with some of the views expressed here and there by the author but if Mohammad Ahmad represents the thinking of a Pakistan Army, of all the poiltical parties they hated the Republicans most. But the biographer of Ayub Khan does not always seem to have well appreciated the General's ideas. For example, on page 73 Ayub Khan is said to be believing that neutralism is the logical outcome of opportunism. According to President Ayub Khan today, the neutralism of India is the logical outcome of opportunism but the neutralism of others is the correct and logical policy!

SG

Federalism in India by Benjamin N. Schoenfeld. (Washington, Public Affairs Press, 1960). 27 pages. Price \$1.00

In his short monograph, Dr. Schoenfeld has analysed some of the problems

facing the tederal structure in India. So far the problem of Centre-State relations in India has not taken any difficult form largely because a single political party has been controlling the Centre and the States and also because that party has had the leadership of a person whose popularity throughout the country is unquestionable. The Indian Constitution is not directly federal and there are strong unitary tendencies in the various articles of the Constitution, yet a problem might arise, the essence of which, according to the author, would be as follows: The problems which Indian federalism faces stem from the needs of her people to have a Central Government armed with sufficient powers needed to solve modern economic and political problems on one hand, and the strong sentiments of regionalism found throughout the land. Stated in other words: "The ultimate question India faces is whether future political and social drives for stronger States will be offset by the economic policies of the country which require a strong Centre through which such economic progress will be administered." The author does not attempt to make predictions about the future and only analyses some of the factors in the situation. The monograph is primarily intended for American students studying the Indian governmental system and for others, the valuable publication is somewhat limited. S.G.

The Diplomacy of India by Ross N. Berkes and Mohinder S. Bedi. (London, Oxford University Press, 1958). 221 pages. Price 30sh.

This is a study of Indian Foreign Policy based on the perusal of the voting and speeches of Indian delegates in the United Nations. Take the majority of the studies undertaken under the auspices of the American universities, this one shows good evidence of scholarship and thorough grasp of details. Again, like them, it shows the prejudices of the authors and a certain intolerance towards those who do not agree with the dominant American view.

The first section of the book deals with "India's Conception of the United Nations." The author's following description of it will not create any controversy: "...it (the United Nations) is viewed by India primarily as an incomparable vehicle of communication. It becomes an instrument through which the needs and wants of a heretofore voiceless world can seek remedies... Beyond that, it is an instrument of negotiation, and of the reconciliation of interests by means of negotiation."

But when the authors come to grip with specific issues, their analysis flounder on prejudices. India's position on Korea is scarcely understood. Her refusal to be a party to America's efforts to convert the United Nations to a larger edition of the Atlantic Pact is misrepresented.

A sound view expressed by the authors is that India's role has moved away from that of a radical power to that of a conservative power. This conclusion is based on a survey of India's activities in the U.N. during 1947-57. Events outside the U.N. also collaborate this opinion. With the attainment of a certain degree of economic progress and political stability, the dominant political trends in India have ceased to be influenced by any revolutionary zeal; both in the internal and external fields India's present tendency is to follow moderate and cautious policies.

The quality of the book is considerably reduced by the authors' obsession with the fear that India had not made a good impression on Americans. Often one comes along with such statements "It is very well for the Assembly to be reprimanded for its sensitivity to the evils of colonial rule, but not always so very well when the reprimand comes from a power so publically insensitive to the evils of Communist rule." In such places the purpose of the book, which is the examination of Indian diplomacy in the U.N. is forgotten and attention is concentrated on comparison of Indian role to that of America, often to the detriment of India.

The whole book suffers from the fact that it was written when the United States was the unrivalled military power in the world during 1948-1957. During the past few years the Soviet Union has not only kept up with America, but outstripped her. Now American scholars will no more be interested, as the authors of this were, to maintain that India's search for conciliation and negotiation was an indirect appearament to aggression.

K.

North from Kabul by Andrew Wilson. (London, Unwin, 1961). 190 pages. Price 25sh.

Although Afghanistan has managed to remain out of the mainstream of events in Asia during the past two decades, her important role as a buffer state lying between the Indian Sub-Continent and Russia has in no way diminished since the days of Kipling and the Tsarist-menace theme that obsessed the imperialists of the last century. Mr. Andrew Wilson felt that such an Afghanistan, still living within the shadow of Russia, filled with intrigue and rumour, and made precarious by the dangerous political liaison of an autocratic government bent on reform, would be interesting material for study. He, therefore, chose to see the country as few people have seen it, and tells us the story in this exciting volume.

With a miniature camera and a knowledge of the language, he entered the country by the back door—Meshed to Herat—and immediately stumbled on the construction of a military airfield by Russian engineers, close to the Persian and Pakistan borders. From then on, travelling by decrepit trucks and buses, and for part of the time as a "Russian", he found himself drawn into a world as strange as some of the novels of Kipling and Buchan. His lone wanderings brought encounters with Russian mapping parties, oil prospectors and technicians engaged in driving tunnel through the Hindu Kush.

Five times the author crossed the Hindu Kush, the last time in a Russian aeroplane. From its icy gorges to the smoking sands of the Oxus Valley, he portrays the Afghan landscape in all its fierce beauty and squalor. Across his canvas move the Afghans—the author's romantic companions of the road—presented with verve and intimacy by one for whom Central Asia is a vital, living stage.

There are more than thirty pages of interesting photographs to illustrate the text. The book is written in a lively and engrossing style, almost in the form of a story—dialogues and all.

D.K.P.

Privileges of the Military Personnel (and of the Naval and Air Force) in Courts of Law (Civil, Criminal, Revenue) by B. L. Goswamy. (New Delhi, K. Gandhi & Co., 1960). 146 pages. Price Rs. 10.

This book enumerates in detail the various privileges which Army, Naval and Air Force personnel can claim in Courts of Law. It is a very useful book and is a handy summary of the provisions of law pertaining to privileges of Armed Forces personnel. It also contains a brief commentary containing the views of various high courts on the interpretations of some of these provisions which are not otherwise readily available. The book makes an interesting reading and is useful for information purposes for servicemen as well as ex-servicemen.

SECRETARY'S NOTES

ANNUAL SUBSCRIPTION

Many Members have not yet paid 1961 subscription, which became due on 1st January. If you have not paid yours, would you please do so without delay, and so save the Institution the cost of sending further reminders.

SUGGESTIONS FOR THE JOURNAL

The USI Journal is in its ninety-first year of publication. As you will, no doubt appreciate, the Institution spends a great deal of its funds on producing this publication. We would like to have your comments, criticism and suggestions so that we may improve this publication to meet your interests.

OLD BOOKS AND TROPHIES

The Institution is in possession of a collection of old and rare books presented by members from time to time and while such books are not available for circulation, they can be seen by members visiting Delhi. The Secretary will be glad to acknowledge the gift of books, trophies, medals etc., presented to the Institution.

ADDRESSES

The difficulties of tracing addresses are now very much increased. Members are earnestly requested to keep the Secretary informed of changes in their addresses or if possible give a permanent address which will always find them e.g. a Bank.

LIBRARY BOOKS

There are many instances where members are keeping books for four or five months in spite of reminders. It would help the Librarian considerably if members are to ensure the return of books to the Library within two months of their receipt or immediately on their recall.

NEW MEMBERS

From 1st July to 30th September 1961 the following members joined the Institution:—

ACHUTHAN, Captain T. K., Artillery. AGGARWALA, 2/Lieut. V. K., Artillery. AMARJIT SINGH, Captain, The Dogra Regiment.

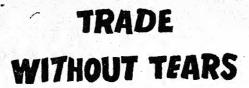
ANAND, Captain K. C., Artillery.
BAKHSHI, Captain B. I., Artillery.
BATRA, Lieut.-Commander P. C., IN.
BHASIN, Captain J. D., The Guards.
BHASIN, Lieut. P. P., A.S.C.
BHIM SINGH, 2/Lieut., The Mahar
M. G. Regiment (Borders).

BISHT, 2/Lieut. M. S., The J. & K. Rifles.

BONSOR, Captain S. S., Engineers. BRAR, Major S. S., Signals.

CHOPRA, Captain N. S., Signals.
CHOPRA, Major O. P., E.M.E.
CHOUDARY, 2/Lieut. R. P. S.,
Artillery.

DALJIT SINGH, Captain, A. S. C.
DATTA, 2/Lieut. S. K., Engineers.
DAVID, Captain I. R., A.S.C.
DHINGRA, 2/Lieut. K. C., Engineers.
GONSALVES, Captain K. Artillery.
GATPHOH, 2/Lieut. S., The Assam
Regiment.
GILL, Captain K. S., Artillery.
GOEL, Captain J. P., Artillery.
GREWAL, Flight/Lieut. A. J. S., I.A.F.
GREWAL, Captain R. S.



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